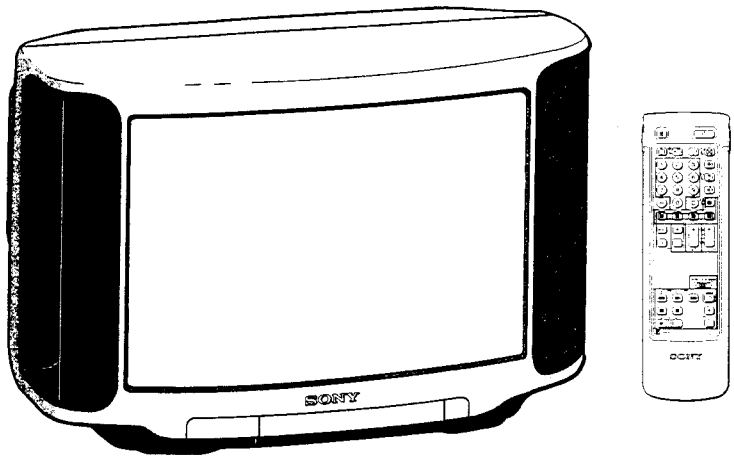
SERVICE MANUAL

BE-3B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-C2981A	RM-833	Italian	SCC-G81E-A	KV-C2981D	RM-833	AEP	SCC-G77C-A
KV-C2980B	RM-833	French	SCC-G85E-A	KV-C2983E	RM-833	Spanish	SCC-G82G-A



MICROFILM

TRINITRON® COLOR TV

SONY®

7365

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
AEP	B/G/H, D/K	GERMAN Stereo	PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Italian	B/G/H	GERMAN Stereo	ITALIA VHF:A-H2 (C) UHF: 21-69 PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, L, I	NICAM Stereo	L VHF:F02-F10 UHF:F21-F60 CABLE:B-Q B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 I UHF:B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Spanish	B/G/H,	NICAM Stereo	PAL B/G VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69	PAL NTSC4.43, NTSC3.58 (VIDEO IN)

MODEL	AEP	Italian	French	Spanish
Power Consumption	108W	108W	108W	108W

SPECIFICATIONS

Picture Tube — Hi-Black Trinitron
Approx. 72 cm (29 inches)
(Approx. 68 cm picture measured diagonally)
110° -deflection

Input/Output Terminals

[REAR]

- 1 21-pin Euro connector (CENELEC standard)
  - inputs for audio and video signals
  - inputs for RGB
  - outputs of TV video and audio signals
- 2/S 2 21-pin Euro connector
  - inputs for audio and video signals
  - inputs for S video
  - outputs for audio and video signals (selectable)

[FRONT]

- 3 Video input - phono jack
- 3 Audio inputs - phono jacks
- 3 S video input 4-pin DIN
- Ω Headphone jacks : stereo minijack

Sound output	2 x 20W (Music power)
Power requirements	220 - 240V
Dimensions	Approx. 720x514x480 mm
Weight	Approx. 38kg
Supplied accessories	RM-833 Remote Commander (1) IEC designation R6 battery (1)
Other features	NICAM , FASTEXT, TOPTEXT.

[RM-833]

Remote control system	infrared control
Power requirements	1.5V dc 1 battery IEC designation R6 (size AA)
Dimensions	Approx. 65x225x21 mm (w/h/d)
Weight	Approx. 157g (Not including batteries)

Design and specifications are subject to change without notice.

Item \ Model name	KV-C2981A	KV-C2980B	KV-C2981D	KV-C2983E
RGB Priority	ON	ON	OFF	OFF
Woofer Box	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON
AKB in 16:9 mode	ON	ON	ON	ON
Norm B/G	ON	ON	ON	ON
Norm I	OFF	OFF	OFF	ON
Norm D/K	OFF	OFF	ON	OFF
Norm AUS	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF
Teletext	ON	OFF	ON	ON
Nicam Stereo	OFF	ON	OFF	ON
Language Preset	Italian	French	Deutsch	Spanish

D

The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R517	1-215-427-00	METAL	1.8K	1%	1/4W	
R518	1-215-427-00	METAL	1.8K	1%	1/4W	
R520	1-215-457-00	METAL	33K	1%	1/4W	
R521	1-215-461-00	METAL	47K	1%	1/4W	
R522	1-249-433-11	CARBON	22K	5%	1/4W	
R523	1-249-433-11	CARBON	22K	5%	1/4W	
R524	1-249-425-11	CARBON	4.7K	5%	1/4W	
R525	1-249-425-11	CARBON	4.7K	5%	1/4W	
R526	1-249-421-11	CARBON	2.2K	5%	1/4W	
R528	1-259-880-11	CARBON	2.2M	5%	1/4W	
R529	1-247-895-00	CARBON	470K	5%	1/4W	
R600	1-216-490-11	METAL OXIDE	39K	5%	3W	F
R601	1-249-417-11	CARBON	1K	5%	1/4W	
R603	1-215-875-11	METAL OXIDE	10K	5%	1W	F
R604	1-249-420-11	CARBON	1.8K	5%	1/4W	
R605	1-216-362-11	METAL OXIDE	0.27	5%	2W	F
R607	1-216-421-71	METAL OXIDE	12	5%	1W	F
R608	1-216-365-00	METAL OXIDE	0.47	5%	2W	F
R610	1-215-427-00	METAL	1.8K	1%	1/4W	
R611	1-215-859-00	METAL OXIDE	22	5%	1W	F
R612	1-249-428-11	CARBON	8.2K	5%	1/4W	
R613	1-249-417-11	CARBON	1K	5%	1/4W	
R614	1-215-877-11	METAL OXIDE	22K	5%	1W	F
R615	1-249-435-11	CARBON	33K	5%	1/4W	
R616	1-215-479-00	METAL	270K	1%	1/4W	
R617	1-215-901-00	METAL OXIDE	33K	5%	2W	F
R618	1-249-433-11	CARBON	22K	5%	1/4W	
R619	1-216-425-11	METAL OXIDE	56	5%	1W	F
R620	1-247-895-00	CARBON	470K	5%	1/4W	
R621	1-216-425-11	METAL OXIDE	56	5%	1W	F
R622	1-249-437-11	CARBON	47K	5%	1/4W	
R623	1-249-429-11	CARBON	10K	5%	1/4W	
R624	1-249-405-11	CARBON	100	5%	1/4W	F
R625	1-249-434-11	CARBON	27K	5%	1/4W	
R626	1-249-430-11	CARBON	12K	5%	1/4W	
R628	1-249-415-11	CARBON	680	5%	1/4W	F
R629	**1-244-945-91**	**CARBON**	**1M**	**5%**	**1/2W**	
R630	**1-218-265-11**	**METAL**	**8.2M**	**5%**	**1W**	
R631	**1-205-949-11**	**WIREWOUND**	**1.8**	**5%**	**10W**	
R632	1-247-807-31	CARBON	100	5%	1/4W	
R633	1-247-807-31	CARBON	100	5%	1/4W	
R634	1-249-397-11	CARBON	22	5%	1/4W	F
R635	1-249-437-11	CARBON	47K	5%	1/4W	
R636	1-249-417-11	CARBON	1K	5%	1/4W	
R637	1-249-409-11	CARBON	220	5%	1/4W	
R638	1-249-433-11	CARBON	22K	5%	1/4W	
R639	1-215-427-00	METAL	1.8K	1%	1/4W	
R640	1-216-381-11	METAL OXIDE	0.22	5%	3W	F
R641	1-216-381-11	METAL OXIDE	0.22	5%	3W	F
R642	**1-205-949-11**	**WIREWOUND**	**1.8**	**5%**	**10W**	
R644	1-247-807-31	CARBON	100	5%	1/4W	
R645	1-249-422-11	CARBON	2.7K	5%	1/4W	
R646	1-249-377-11	CARBON	0.47	5%	1/4W	F
R647	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R648	1-216-397-11	METAL OXIDE	4.7	5%	3W	F
R800	1-249-421-11	CARBON	2.2K	5%	1/4W	
R801	1-249-429-11	CARBON	10K	5%	1/4W	
R802	1-249-431-11	CARBON	15K	5%	1/4W	
R803	1-249-423-11	CARBON	3.3K	5%	1/4W	
R804	1-249-430-11	CARBON	12K	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R805	1-249-425-11	CARBON	4.7K	5%	1/4W	
R812	1-249-421-11	CARBON	2.2K	5%	1/4W	
R813	1-215-867-00	METAL OXIDE	470	5%	1W	F
R814	1-249-411-11	CARBON	330	5%	1/4W	
R816	1-216-481-11	METAL OXIDE	1.2K	5%	3W	F
R817	1-216-481-11	METAL OXIDE	1.2K	5%	3W	F
R818	1-215-882-00	METAL OXIDE	22	5%	2W	F
R819	1-216-345-11	METAL OXIDE	0.47	5%	1W	F
R820	1-249-403-11	CARBON	68	5%	1/4W	
R821	1-215-909-11	METAL OXIDE	47	5%	3W	F
R822	1-215-868-00	METAL OXIDE	680	5%	1W	F
R824	1-249-420-11	CARBON	1.8K	5%	1/4W	
R826	1-247-752-11	CARBON	1K	5%	1/2W	
R827	1-249-425-11	CARBON	4.7K	5%	1/4W	
R828	1-249-430-11	CARBON	12K	5%	1/4W	
R829	1-249-493-11	CARBON	56K	5%	1/2W	
R830	1-217-778-11	FUSIBLE	1K	5%	1W	F
R833	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R836	1-249-439-11	CARBON	68K	5%	1/4W	
R837	1-249-431-11	CARBON	15K	5%	1/4W	
R840	1-247-807-31	CARBON	100	5%	1/4W	
R841	1-249-418-11	CARBON	1.2K	5%	1/4W	
R842	1-249-441-11	CARBON	100K	5%	1/4W	
R843	1-247-893-11	CARBON	390K	5%	1/4W	
R846	1-249-441-11	CARBON	100K	5%	1/4W	
R847	1-247-891-00	CARBON	330K	5%	1/4W	
R848	1-247-887-00	CARBON	220K	5%	1/4W	
R849	1-249-429-11	CARBON	10K	5%	1/4W	
R850	1-249-425-11	CARBON	4.7K	5%	1/4W	
R851	1-215-898-11	METAL OXIDE	10K	5%	2W	F
R852	1-249-432-11	CARBON	18K	5%	1/4W	
R901	1-202-539-00	SOLID	39	10%	1/2W	
R902	1-202-539-00	SOLID	39	10%	1/2W	
R907	1-247-804-11	CARBON	75	5%	1/4W	
R916	1-249-397-11	CARBON	22	5%	1/4W	
R917	1-249-397-11	CARBON	22	5%	1/4W	
R1200	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1201	1-249-434-11	CARBON	27K	5%	1/4W	
R1202	1-249-393-11	CARBON	10	5%	1/4W	F
R1203	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1204	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1205	1-249-428-11	CARBON	8.2K	5%	1/4W	
R1206	1-249-428-11	CARBON	8.2K	5%	1/4W	
R1207	**1-249-417-11**	**CARBON**	**1K**	**5%**	**1/4W**	
R1208	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1209	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1210	**1-249-417-11**	**CARBON**	**1K**	**5%**	**1/4W**	
R1211	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1212	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1213	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1216	1-249-413-11	CARBON	470	5%	1/4W	
R1217	1-249-425-11	CARBON	4.7K	5%	1/4W	

< VARIABLE RESISTOR >

RV301 1-238-552-11 RES, ADJ, CARBON 470K

< RELAY >

RY600 1-515-720-31 RELAY

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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

WARNING !!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD, DUE TO A LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED ! ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLIMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ LORS DE TOUT DÈPANNAGE. LE CHÁSSIS DE CE RÈCEPTEUR EST DIRECTEMENT RACCORDÈ Á L'ALIMENTATION SECTEUR.

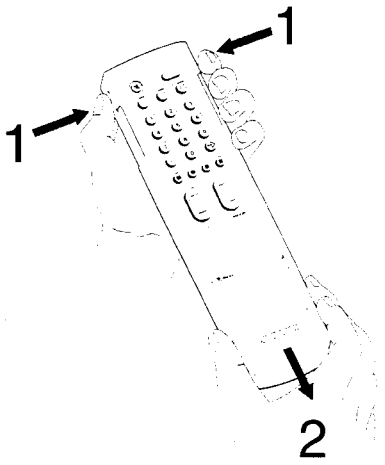
ATTENTION AUX COMPOSANTS RELATIFS Á LA SÈCURITÈ !!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ! SUR LES SCHÈMAS DE PRINCIPE, LES VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÉ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÈRO DE PIÈCE EST INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

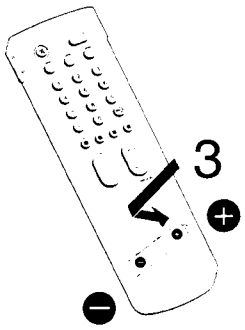
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

Getting Started

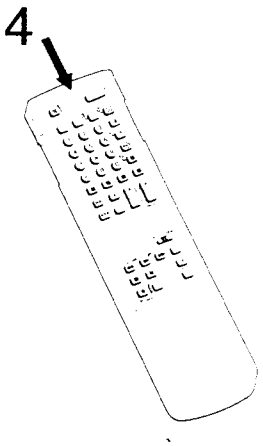
Inserting the Battery Into the Remote Commander



Remove the cover.



Check the correct polarity.

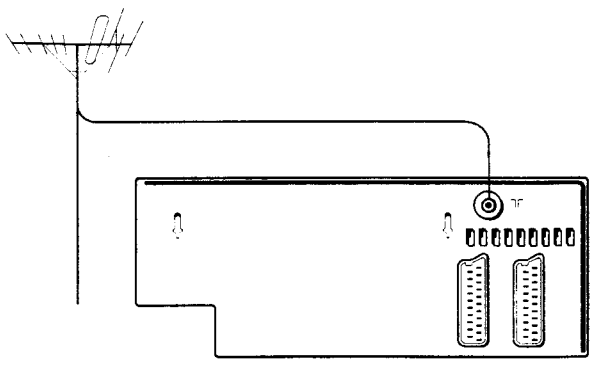


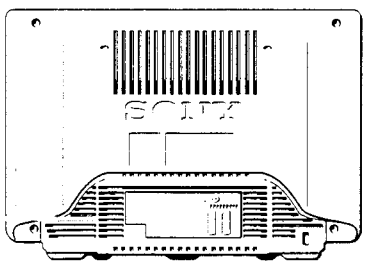
Refit the outside cover making sure that the Full Function side is visible.

About Battery Life
Under normal operation, a battery will last up to half a year.

Connecting the Aerial

Connect the aerial to the ⊓ socket at the rear of the TV. (cable not supplied)





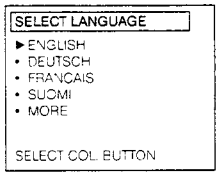
Choosing a Language

(See inside of front cover and back cover)

1 Depress ⏻ A on the TV.
The TV turns on. If the standby indicator B on the TV is lit, press ▭ 3 or any number button 4 on the Remote Commander.

2 Press MENU 7 on the Remote Commander.
The SELECT LANGUAGE screen appears.

3 Press one of the colour buttons 17 on the Remote Commander to select a language (Press the white button 17 to display other language alternatives). The SELECT LANGUAGE screen clears and all subsequent menus appear in the chosen language.



Note: From the second time when you turn on the TV, the MENU screen appears instead of the SELECT LANGUAGE screen. Press the yellow button 17 then press the white button 17 to redisplay the SELECT LANGUAGE screen.

Tuning in to Channels

You can tune in up to 60 channels to programme positions either automatically or manually.

auto tuning: A single button press allows all receivable channels to be tuned. Use if you are unfamiliar with the channel numbers of stations.

manual tuning: Use if you are familiar with the channel numbers of stations.

Choose the more appropriate way for you.

Tuning in to Channels Automatically

There are two possibilities for auto tuning;

A. On the TV: hold down ▶▶□ E on the front of the TV for 2 seconds
Note: The button ▶▶□ for Automatic Presetting of channels is protected to prevent accidental usage. Use a pencil to press it.
or

B. On the Remote Commander: as follows

1 Press MENU 7.

2 Press the white button 17.

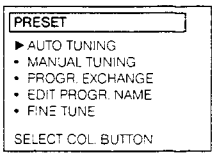
3 Hold down the red button 17 for 2 seconds,

Note: Press the green button 17 to cancel.

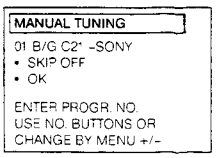
Tuning in to Channels Manually

1 Press MENU 7.
The MENU screen appears. (MENU)

2 Press the white button 17 to select PRESET.
The PRESET screen appears.



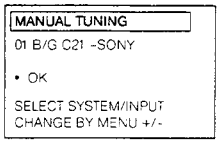
3 Press the green button 17 to select MANUAL TUNING
The MANUAL TUNING screen appears.



4 Press the number buttons ❹ or MENU +/- ❾ to select a programme position.
If you use the number buttons ❹, enter a double-digit number. (e.g. for programme number 4, first press 0, then 4)

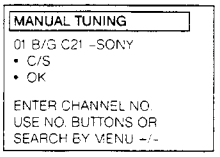
5 Press the green button ⓱.

Note: Use MENU +/- ❾ to select TV system.
You can alternatively select input sources which may be assigned to programme positions.
The display changes as follows:
B/G ➡ D/K ➡ AV1 ➡ RGB ➡ AV2 ➡ YC2 ➡ AV3 ➡ YC3



6 Pess the green button ⓱.

Note: If a video input source is selected in step 5, this is now stored.
Refer to step 4 to tune other programme positions.



7 If you have selected B/G in step 5, press the red button ⓱ to select C (regular channel) or S (cable channel).

8 Press the number buttons ❹ or MENU+/- ❾ to select the channel number.
If you use the number buttons ❹, enter a double-digit number. (e.g. for channel 23, first press 2, then 3)

9 Press the green button ⓱ to store.

Note: If you want to preset other channels, repeat steps 4 to 9.

10 Press MENU ❼ twice to return to the normal screen.

Note: You can skip unused programme positions when selecting programmes with the PROGR +/- buttons ⓲.
Press the red button ⓱ to skip in step 4. However, the skipped programmes may still be called up when you use the number buttons.

Basic TV Operations

Turning the TV on and off

Turning on
Depress ⏻ A on the TV.

Turning off temporarily
Press ⏻ ⓾ on the Remote Commander.
The TV enters standby mode and the standby indicator B on the front of the TV lights up.

Turning on again
Press ▢ ❸, PROGR +/- ⓲, or one of the number buttons ❹ on the Remote Commander.

Turning off completely
Depress ⏻ A on the TV.
Note: It is recommended to use ⏻ A to turn off the TV. This could help you save energy.

Selecting TV Programmes

Press PROGR +/- ⓲ or press the number buttons ❹.

To select a double-digit number
Press -/-- ❺, then the number buttons ❹.

Adjusting the Volume

Press 🔊 +/- ⓳.

Muting the Sound

Press 🔇 ❶
To resume normal sound, press 🔇 ❶ again.

Displaying the On-screen Indications

Press ⓓ ⓮ once to display the on-screen indications.
Press again to make the indications disappear.

Operating the TV Using the Buttons on the TV

With the buttons on the TV, you can adjust or select the functions as follows:
Press 🔊 +/- D to adjust the volume.
Press P +/- C to select programme numbers or to turn the TV on from the standby mode.
Press ⇄ F to select the input source.
Press ⏭ E to preset channels automatically.

Advanced TV Operations

Operating the Menu System

You can adjust picture and sound, preset channels to programme positions and utilise other convenient features by using the following menu system.

Press:	to:
1 MENU ❼ (MENU)	enter the MENU screen
2 a colour button ⓱ (II)	select an item you want to change (The selected item is marked by a triangle.)
3 MENU +/- ❾ (MENU) (+) (−)	change (or adjust) the contents of the item
4 MENU ❼	return to the MENU screen
5 MENU ❼ again	return to the normal screen
Press MENU ❼ once or twice whenever you want to return to the normal screen.	

Note: When selecting menus, the picture becomes darker. If, however, an item in the PICTURE ADJUSTMENT menu is selected, normal level of TV picture is restored to allow the best adjustment.

Adjusting the Picture and Sound

Although picture and sound are adjusted at the factory you can adjust them to suit your own taste.

1 Press MENU ❼.
The MENU screen appears. (MENU)

2 Press the red button ⓱ to select PICTURE or the green button ⓱ to select SOUND.

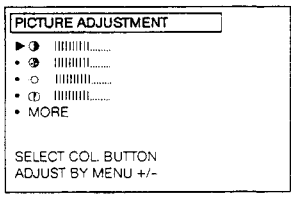
3 Press the respective colour button ⓱ to select an item.

4 Press MENU +/- ❾ to adjust.

5 Press MENU ❼ twice or wait until the menu displays disappear automatically to return to the normal screen.

PICTURE ADJUSTMENT

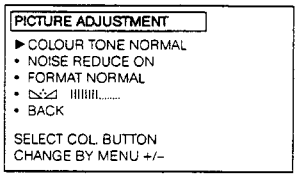
(First Page)



Press colour button	Effect
Red: For Picture ◑	Less —+— More
Green: For Colour ◕	Less —+— More
Yellow: For Brightness ☼	Darker —+— Brighter
Blue: For Sharpness ◫	Softer —+— Sharper
White:	Next page of PICTURE ADJUSTMENT

PICTURE ADJUSTMENT

(Second Page)

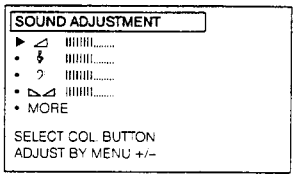


Press colour button	Effect
Red: For Colour Tone	Normal ⇨ Warm (reddish colour tone) ⇨ Cool (blueish colour tone)
Green: For Noise Reduce	ON: Reduces picture noise (in case of low signal level) OFF: Normal setting
Yellow: For Format	Normal: Normal setting 16:9 Wide screen effect
Blue: For Hue control ◺◿ (only for NTSC video signals)	Reddish —+— Greenish
White:	Back to first page of PICTURE ADJUSTMENT

Note: Press →•← ❽ on the Remote Commander to reset to the factory preset levels for picture and sound.

SOUND ADJUSTMENT

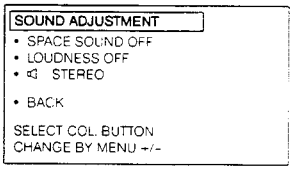
(First Page)



Press colour button	Effect
Red: For Volume ◿	Less —+— More
Green: For Treble 𝄞	Less —+— More
Yellow: For Bass ?	Less —+— More
Blue: For Balance ◺◿	More left – more right
White:	Next page of SOUND ADJUSTMENT

SOUND ADJUSTMENT

(Second Page)



Press colour button	Effect
Red: For Space Sound	OFF: normal sound ON: for a special acoustic sound effect
Green: For Loudness	OFF: normal sound ON: when listening to music broadcast
Yellow: For Stereo	Stereo ⇨ Mono A (left channel) ⇨ Mono B (right channel) ⇨ Mono
White:	Back to first page of SOUND ADJUSTMENT

Note: Press →•← ❽ on the Remote Commander to reset to the factory preset levels for picture and sound.

Using Special Features

With your TV you can utilise special features such as Parental Lock or Sleep Timer.

1 **Press MENU ❼.**
The MENU screen appears. (MENU)

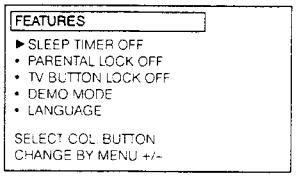
2 **Press the yellow button ⓱ to select FEATURES.**

3 **Press the respective colour button ⓱ to select an item.**

4 **Press MENU +/– ❾ to change.**

5 **Press MENU ❼ twice or wait until the menu displays disappear automatically to return to the normal screen.**

FEATURES



Press colour button	Effect
Red: For Sleep Timer (Automatic switch off function)	OFF ⇨ 0:30 ⇨ 1:00 ⇨ 1:30 ⇨ 2:00 (hours) After the selected time the TV set switches itself automatically into standby mode.
Green: For Parental Lock (For preventing children from watching programmes which you consider unsuitable)	OFF: Normal setting ON: The TV-channel you are watching is now blocked. In this way you can prevent undesirable broadcasts from appearing on the screen.
Yellow For TV Button Lock	OFF: Normal setting ON: The buttons on the TV do not function anymore. (The Remote Commander still operates)
Blue: For Demo Mode	ON: A sequence of menu pictures is displayed. Press any button on the Remote Commander to stop the function.
White: For Language	The SELECT LANGUAGE screen appears.

Advanced Presetting Functions

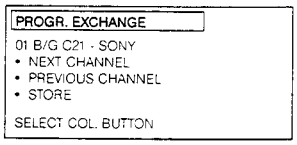
Exchanging Programme Positions

You can exchange the programme positions to a preferred order (example: exchange programme 09 (channel C21) with programme 15 (channel C24).

1 **Press MENU ❼.**
The MENU screen appears (MENU)

2 **Press the white button ⓱.**
The PRESET screen appears.

3 **Press the yellow button ⓱.**
The PROGR. EXCHANGE SCREEN appears.



4 **Press the white button ⓱ repeatedly until the desired programme number (09) appears.**

5 **Press the red or the green button ⓱ repeatedly until the desired channel number (C24) appears.**

6 **Press the white button ⓱ to store.**
Now exchange has been completed. Channel C24 is tuned in to programme 09 and channel C21 is tuned in to programme 15.

7 **Press MENU ❼ twice to return to the normal screen.**

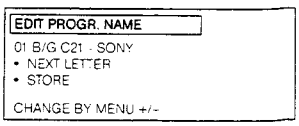
Editing Programme Names

You can edit the programme names up to five letters.

1 **Press MENU ❼**
The MENU screen appears. (MENU)

2 **Press the white button ⓱.**
The PRESET screen appears.

3 **Press the blue button ⓱.**
The EDIT PROGR. NAME screen appears.
The first character flashes.



4 Press MENU +/- ⑨ to edit the first letter.
The first letter changes as follows
A ⟷ B ⟷ ... ⟷ Z ⟷ 1 ⟷ ... 9 ⟷ "-" (space).

5 Press the red button ⑰ to move to the next letter.

6 Repeat steps 4 to 5, until the fifth letter is chosen.

7 Press the green button ⑰.
The programme name is stored, and the normal screen appears. To edit another programme name, repeat steps 1 to 7.

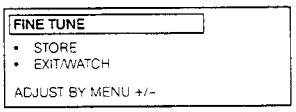
Fine Tuning

You can adjust the receiving conditions by the FINE TUNE function.

1 Press MENU ⑦
The MENU screen appears. (MENU)

2 Press the white button ⑰.
The PRESET screen appears.

3 Press the white button ⑰ again.
The FINE TUNE screen appears.



4 Press MENU +/- ⑨ to adjust the receiving condition.

5 Press the red button ⑰ to store the adjustment, or press the green button ⑰ not to store.
Now the normal screen appears. If you have pressed the green button, the fine tuned condition is cancelled once you choose another programme.

Note: If the FINE TUNE screen disappears automatically before you press the red button ⑰, the fine tuned condition is not stored. Repeat steps 1 to 5.

Tuning in to a Channel Temporarily

You can tune in to a channel temporarily, even when it has not been preset.

1 Press C ⑯ on the Remote Commander.
For cable channels press **C** ⑯ twice. The indication "C" (or "S" for cable channels) appears on the screen.

2 Enter a double digit channel number using the number buttons (e.g. for channel 23, first press 2, then 3).
The channel appears.
However, the channel is not stored.

Teletext Operation

TV stations broadcast teletext programmes via the TV channels. For basic operation of teletext, use the simple side of the Remote Commander. For the advanced features of teletext, use the buttons indicated in green on the full function side of the Remote Commander.

Basic Teletext Operation

Switching Teletext on and off

1 Select the channel which carries the teletext service you wish to view.

2 Press ⊜ ⓫ to display Teletext.
If no teletext signal is broadcast, the indication P100 is displayed on a black screen.

3 Input three digits for the page number using the number buttons ❹.
The numbers are displayed on the screen and the requested page appears in a few seconds.
Note: If you make a mistake, type in any three digits, then re-enter the correct page number.

4 Press ▭ ❸ to return to the TV mode.

Notes:
• To change the teletext channels. First press ▭ ❸ to return to the TV mode, then repeat steps 1 to 3.
• If the signal of a TV channel is weak, teletext errors may occur.

Advanced Teletext Operation

Using Fastext
With Fastext you can access pages with one button press. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons ❻ on the Remote Commander.
Press the corresponding colour button ❻ on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed in a few seconds.

Requesting the Index page
Press ⌂ ⓱. The Index page appears.

Accessing the next or preceding page
Press ⊡(PAGE −) or ⊡(PAGE +) ⓲. The next or the preceding page appears on the screen.

Superimposing the teletext display on the TV picture
Press ⊜ ⓫ once if you are in text mode or press ⊜ ⓫ twice if in TV mode.
To return to the normal teletext display press ⊜ ⓫ again.

Preventing a teletext page from being updated or changed
Press ⏲ (HOLD) ❷. The HOLD symbol (⏲) appears on the screen and the selected subpage is held until you press ⊜ ⓫ to cancel.

Enlarging the teletext display
Press ⊜ ⓭ once to enlarge the upper half. Press twice to enlarge the lower half. Press again to restore the normal display.

Revealing concealed information (e.g. answers to a quiz)
Press ⍰ (REVEAL) ⓮. The information is revealed. Press ⍰ ⓮ again to conceal the information.

Watching TV while waiting for a requested page to be displayed

1 Request a new teletext page.

2 Press ⊠ (TEXT CL) ⓬.
The TV programme is displayed and the symbol ⊜ is displayed at the top of the page.
Note: When the requested page is available the page number is displayed at the top of the screen.

3 Press ⊜ ⓫ to view the page.

To cancel the request
Display the teletext page, then press ⊜ ⓫. The request is now cancelled. Press ▭ ❸ to resume TV mode.

Using the Favourite Page system
You can store up to four of your favourite teletext pages per programme with the help of the Favourite page system. In this way you have quick access to the pages you watch frequently.

Storing the Favourite Pages

1 Select the page you would like to store using the number buttons ❹.

2 Press ⇨ ⓯ twice.
The colour prompts at the bottom of the screen flash.

3 Press any of the colour buttons ❻ on the Remote Commander to store the selected page.
The page is now stored on this button.

Repeat steps 1 to 3 for the other 3 pages available.

Displaying the Favourite pages

1 Press ⇨ ⓯.

2 Press the colour button ❻ corresponding to the colour prompt onto which the desired page is stored.
The page is requested. (It may take a few seconds to be received).

Note: Step 1 must be taken before every favourite page selection otherwise the normal Fastext facility operates.

Using the Time Function in the TV mode
Press ⏲ ⓬ to request the time. Press again to cancel the request.
Note: This function is available only when teletext is broadcast.

Connecting Other Equipment

You can connect optional audio/video equipment to this TV such as VCRs, video disc players, cameras or stereo systems.

Connector	Acceptable input signal	Available output signal
1 M (AV1/RGB)	Audio/video and RGB signal	Audio/video signal from TV Tuner
2/S 2 L (AV2/YC2)	Audio/video and S-video signal	Audio/video signal from selected source
3/3 G H (AV3)	Audio/video signal	No outputs
3/S 3 G I (YC3)	Audio/S-video signal	No outputs

To watch a video input picture, press ❷ until the desired video input appears.
To return to the normal TV picture, press ❷ repeatedly or press ❸.
If you have a decoder, connect it to 1 M

Connecting a VCR Using the TV Aerial Terminal

Connect the aerial output of the VCR to the aerial terminal K of the TV. It is recommended to tune in the VCR signal to programme number "0". For details, see "Tuning in to Channels Manually" on page 20.

S video input (Y/C input) I L.
Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals.
Separating the Y and C signals prevents them from interfering with each other and therefore improves the picture quality (especially luminance). This TV is equipped with 2 video input terminals through which these signals can be input directly.

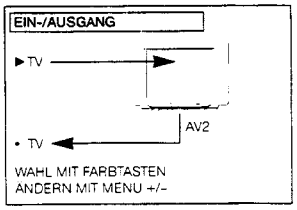
Checking and Selecting the Input and Output Sources Using the Menu

You can display a menu screen to see which input and output source are selected. You can also change the selecting using this menu.

Checking the Input and Output Sources

1 **Press MENU ❼.**
The MENU screen appears.

2 **Press the blue button ⓱ to select INPUT/OUTPUT.**
The INPUT/OUTPUT screen appears.



Selecting an Input Signal

Press the red button ⓰ to select INPUT. Press MENU +/- ❾ to select the desired input source.
You can select among the following sources:

TV ⟷ AV1 ⟷ RGB ⟷ AV2 ⟷ YC2 ⟷ AV3 ⟷ YC3

Selecting an Output Signal

The 2/S 2 connector L outputs the source input from the other connectors. Press the green button ⓱ to select OUTPUT. Press MENU +/- ❾ to select the desired output source.
You can select among the following sources:

TV ⟷ AV1 ⟷ AV2 ⟷ YC2 ⟷ AV3 ⟷ YC3

Note: Press ❼ twice or wait until the menu display disappears automatically to return to the normal screen.

Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most Sony remote-controlled video equipment such as: Beta, 8 mm or VHS VCRs or video disc players.

Tuning the Remote Comander to the equipment

1 **Set the VTR 1/2/3 MDP selector ⓴ according to the equipment you want to control:**
VTR 1: Beta or VCR
VTR 2: 8mm VCR
VTR 3: VHS VCR
MDP: Video Disc Player

2 **Use the buttons ㉑ to operate the additional equipment.**

Notes:
• If your video equipment is furnished with a COMMAND MODE selector: set this selector to the same position as the VTR 1/2/3 MCP selector on the TV Remote Commander.
• If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate
• When you use the ● (record) button, make sure to press this button and the one to the right of it simultaneously.

Using Headphones

You can utilise headphones. Connect them to the headphone jack J, then the sound from the speakers goes off.
Note: You can't control the sound adjustment except for volume.

For your Information

Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

No picture (screen is dark), no sound

- Plug the TV in.
- Press ⏻ A on the TV. (If the standby indicator B is lit, press ▭ ❸ or any number button ❹ on the Remote Commander.)
- Check if the selected video source is on.
- Turn the TV off for three or four seconds and then turn it on again using ⏻ A.

Poor or no picture (screen is dark), but good sound

- Press MENU ❼ to enter the MENU screen, and press the red button ⓱, then adjust ◑ and ☼.

Good picture but no sound

- Press ◿ + ⓳.
- If 🔇 is displayed on the screen, press 🔇 ❶.

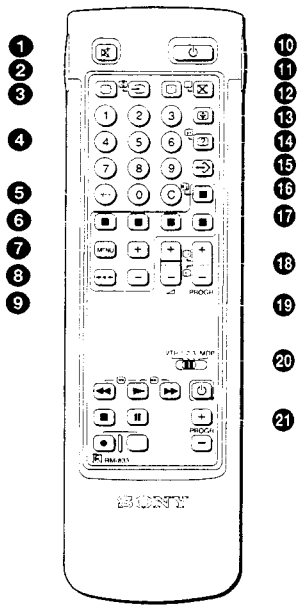
No colour for colour programmes

- Press MENU ❼ to enter the MENU screen, and press the red button ⓱, then adjust ◔.

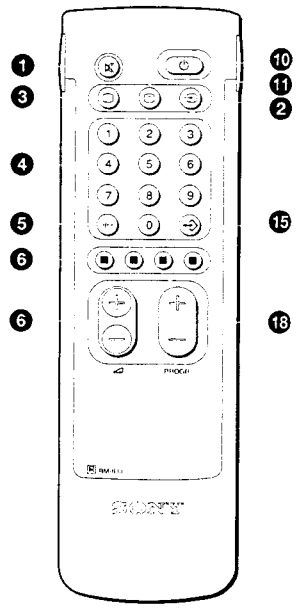
Remote Commander does not funcion

- Replace the battery.

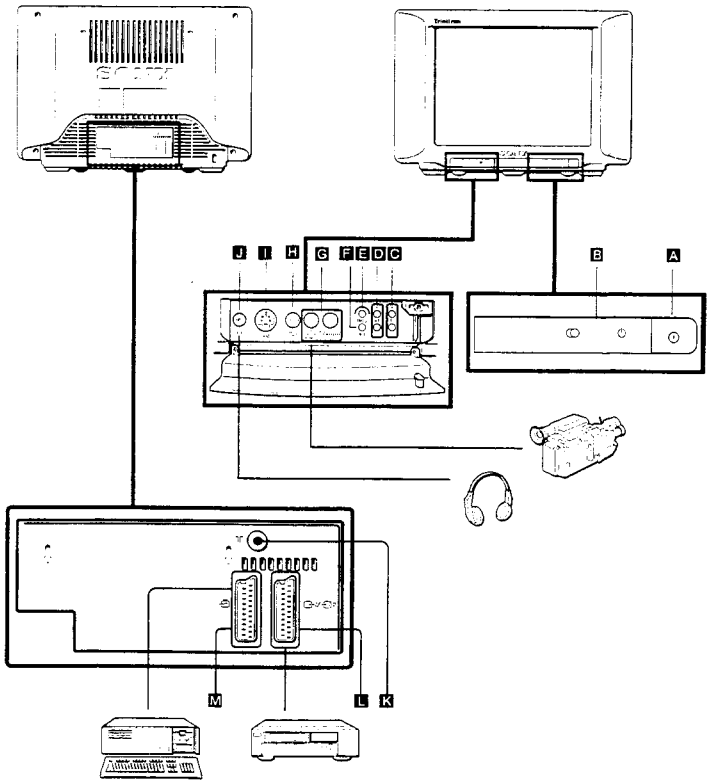
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.



Volständige Seite
Full-Function Side

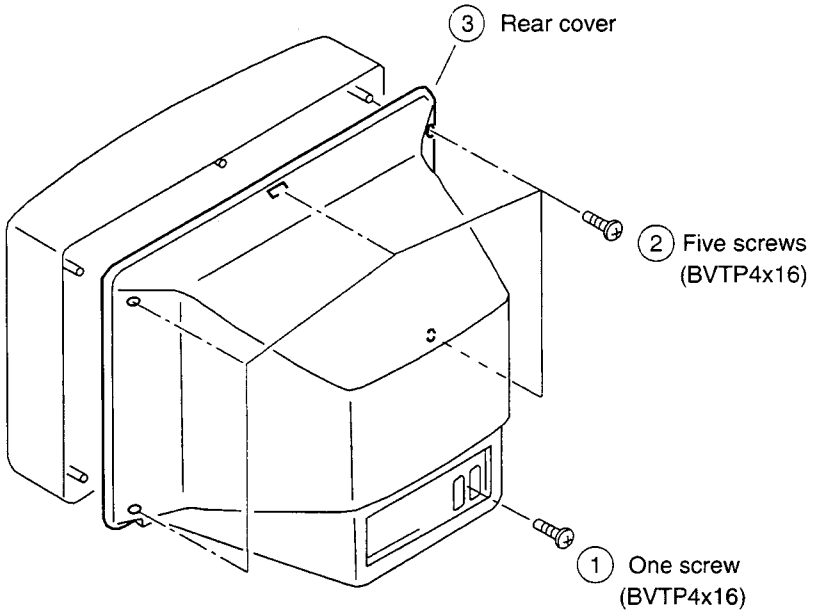


Vereinfachte Seite
Simple Side

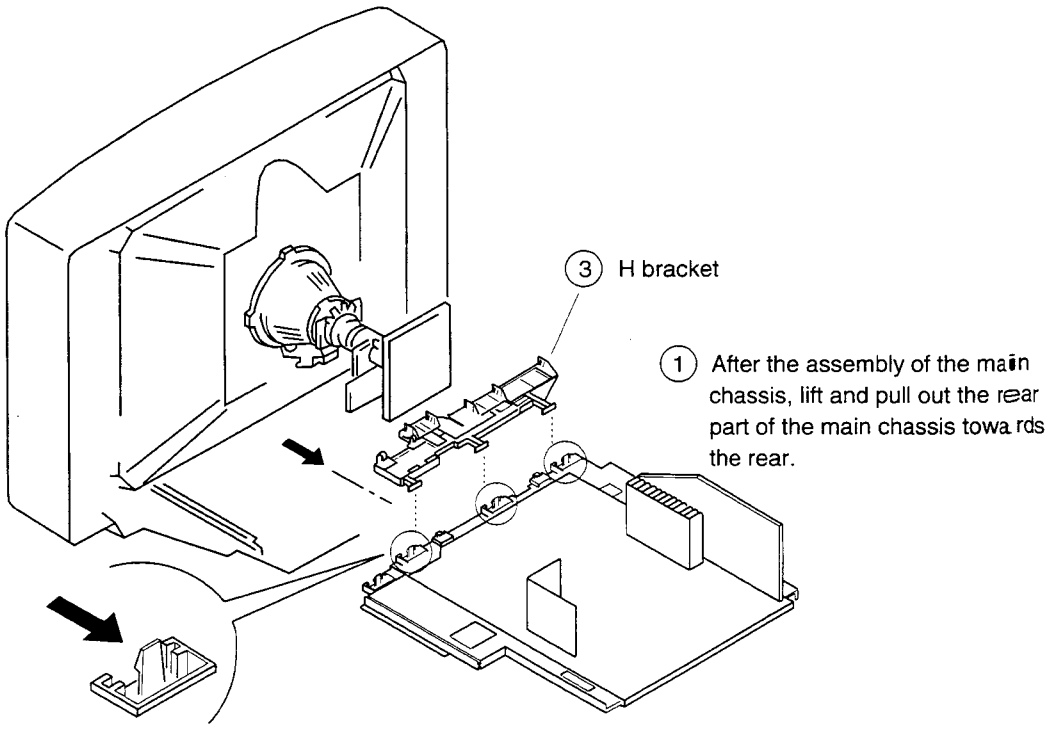


SECTION 2
DISASSEMBLY

2-1. REAR COVER REMOVAL

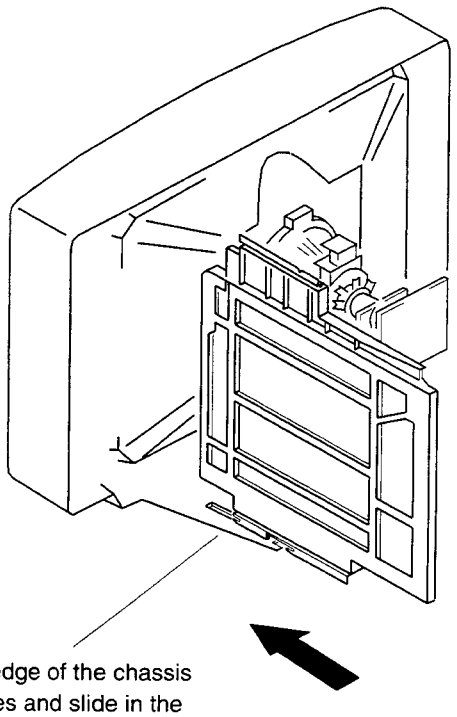


2-2. CHASSIS ASSY REMOVAL



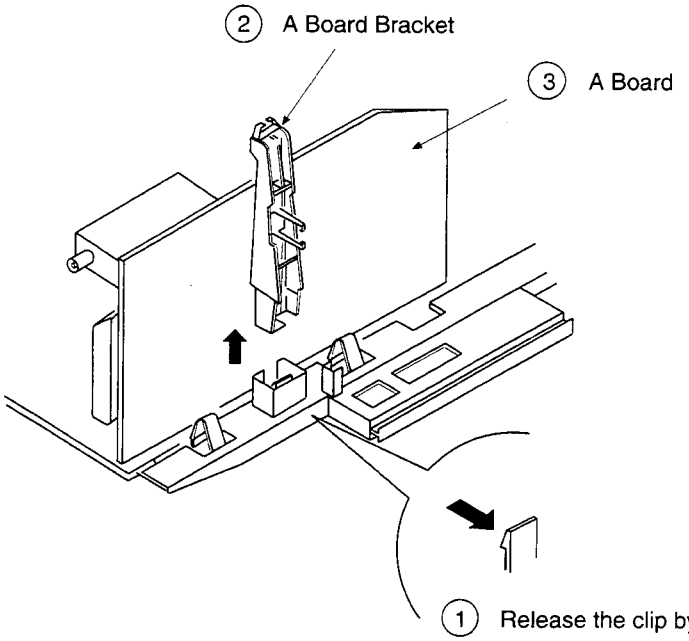
② Push the three claws of the main chassis in the direction of the arrow and remove the H bracket upwards.

2-3. SERVICE POSITION



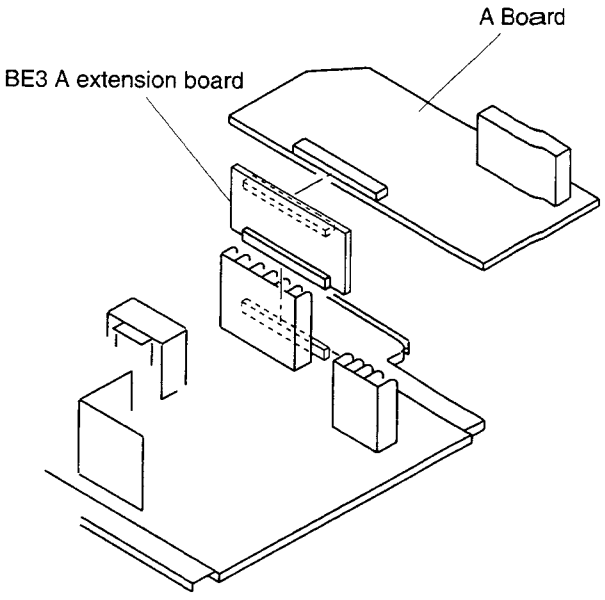
Locate the 2 slots on the edge of the chassis bracket in the locating holes and slide in the direction of the arrow

2-4. A BOARD REMOVAL

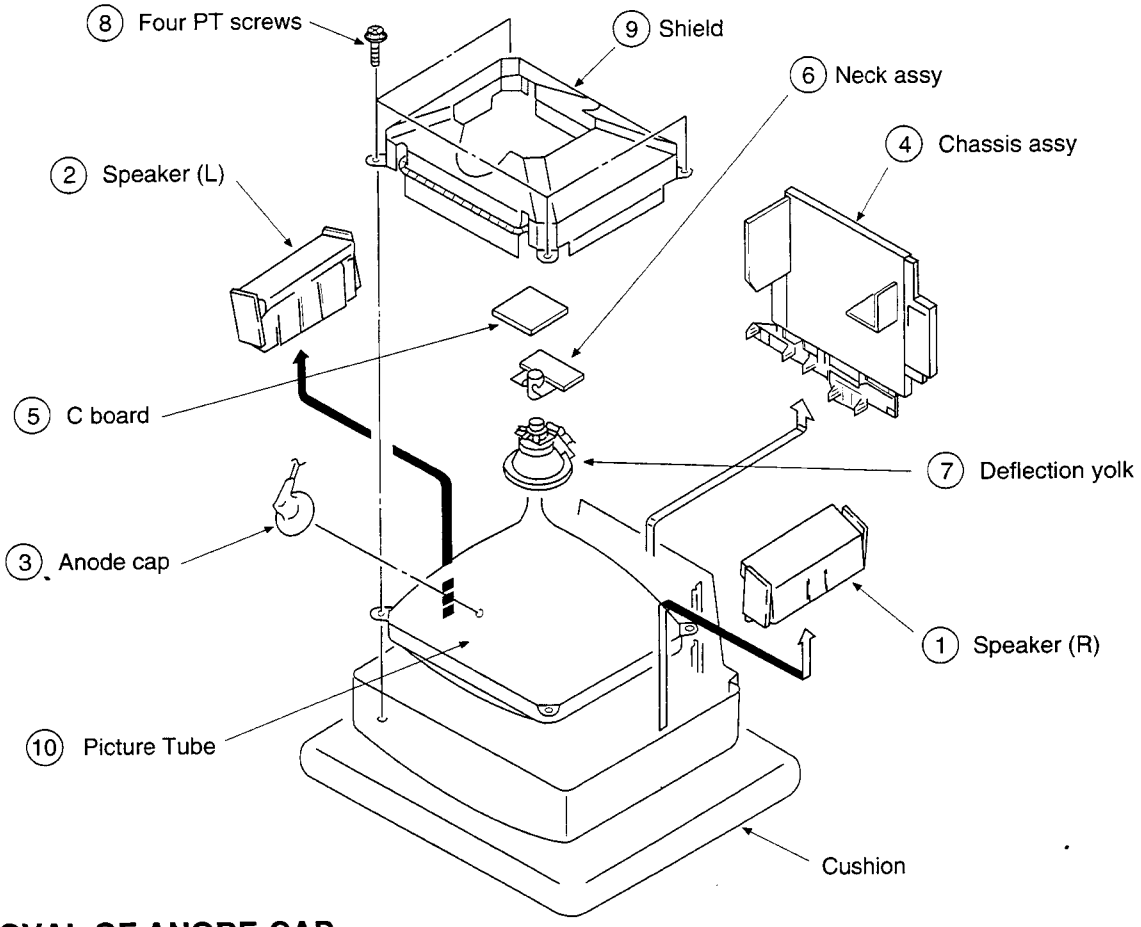


① Release the clip by pressing in the direction of the arrow, shown and lift out the A board bracket

2-5. EXTENSION BOARD



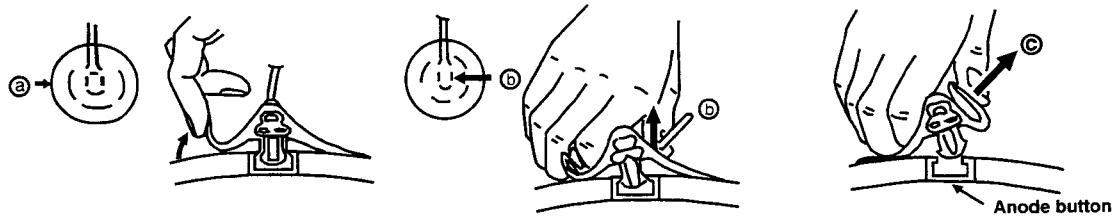
2-6. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

*** REMOVING PROCEDURES.**



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ

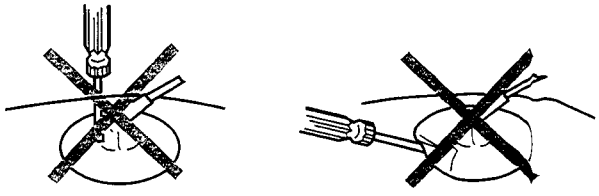
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ

• HOW TO HANDLE AN ANODE-CAP

① Don't damage the surface of anode-cap with sharp shaped material !

② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built into the rubber.

③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or damage the rubber.



SECTION 3
SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings :

◑ Contrast ..... 80% (or remote control normal)
☼ Brightness 50%

- Carry out the following adjustments in this order :

1. Beam landing
2. Convergence
3. Focus
4. White balance

Note: Testing equipment required.
1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

Preparation:
- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
   CONTRAST } normal
   BRIGHTNESS }
2. Position neck assy as shown in Fig.3-2.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke forward and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 - 3-3)
5. Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

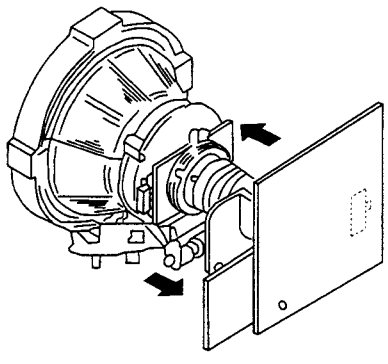
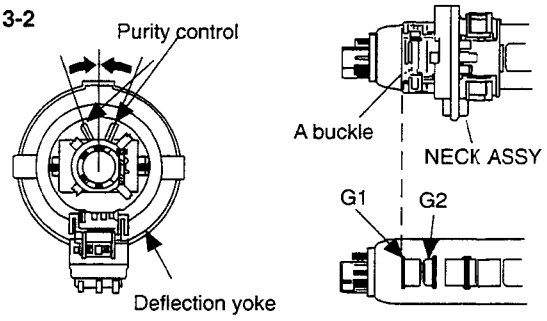


Fig. 3-1

Fig. 3-2



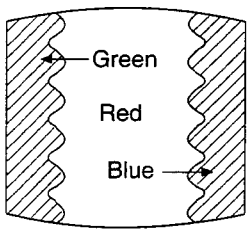


Fig. 3-3

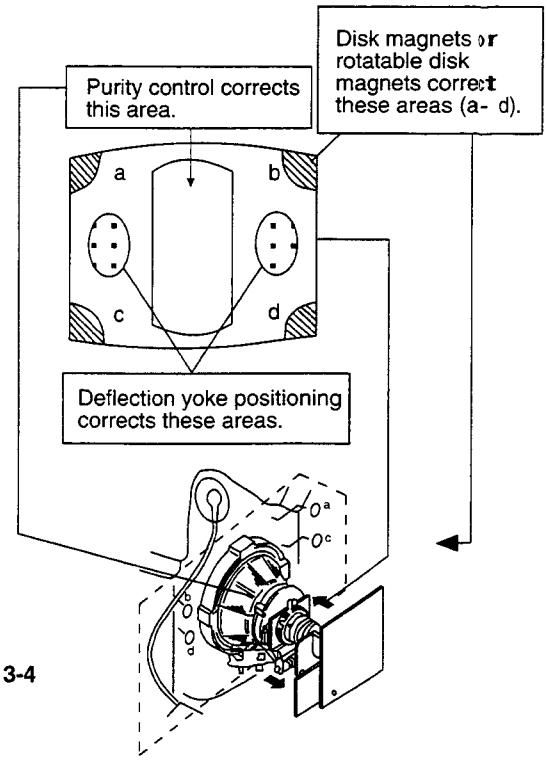


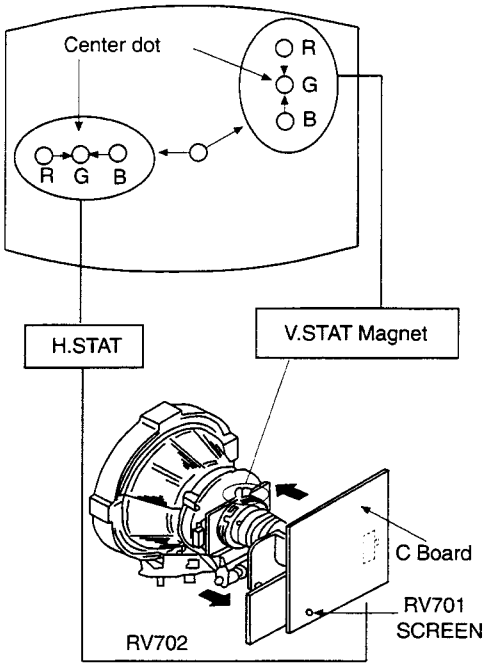
Fig. 3-4

3-2. CONVERGENCE

Preparation:

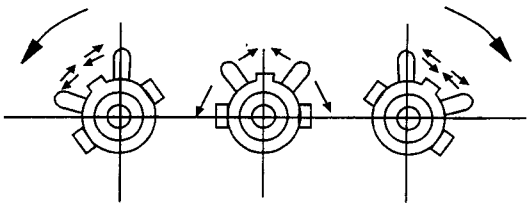
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

(1) Horizontal and vertical static convergence

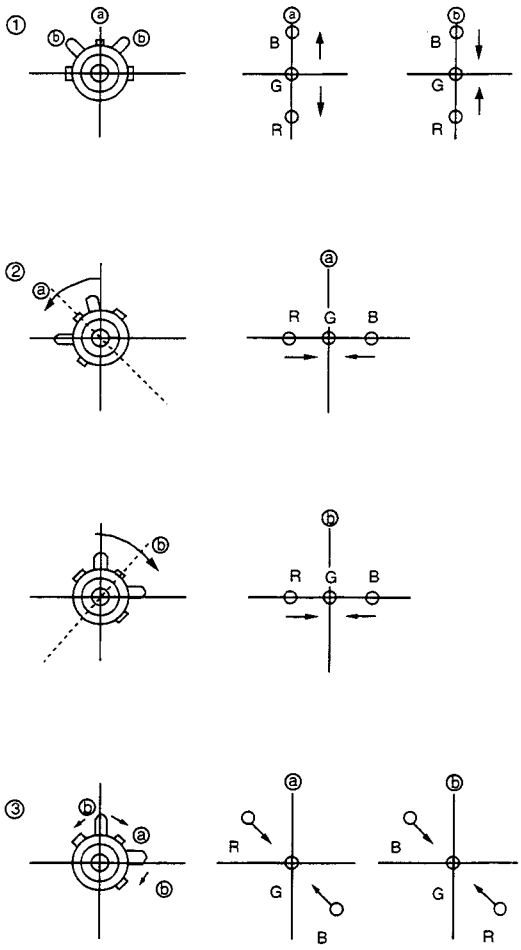


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

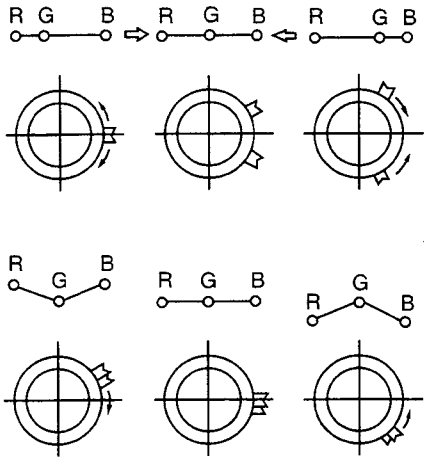
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

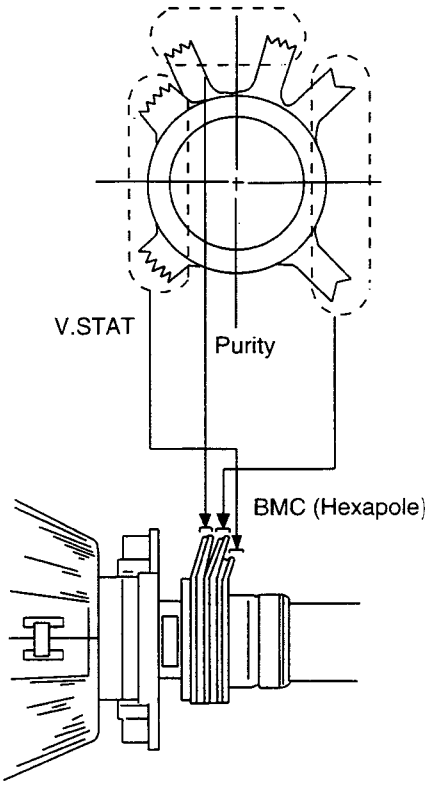


4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet





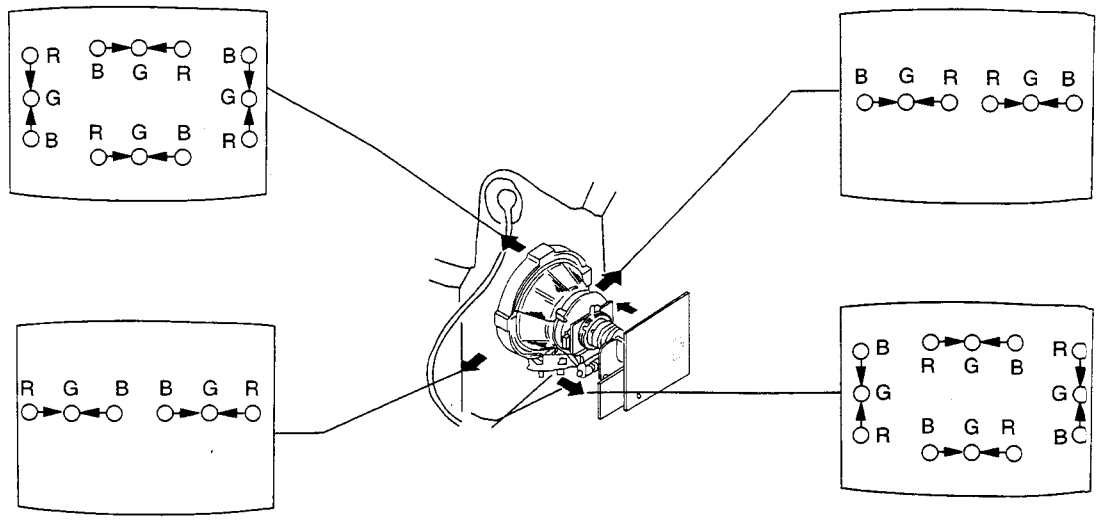
- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
  Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of the screen (by moving the dots in the horizontal direction).

(2) Dynamic convergence adjustment.

Preparation:

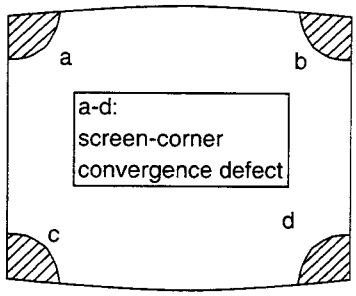
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

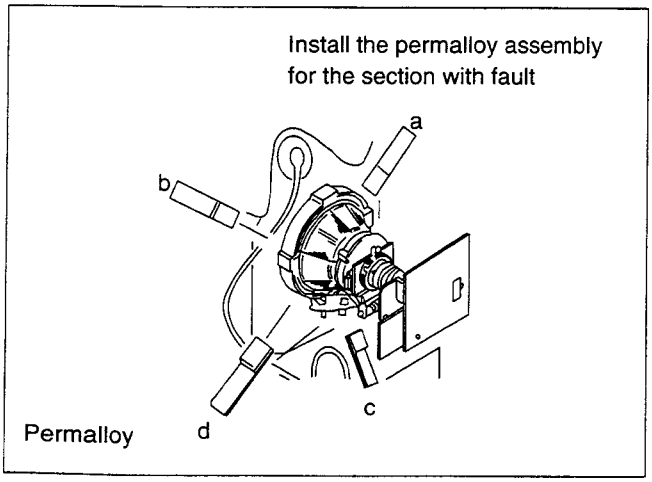
1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Re-install the deflection yoke spacer.



(4) Screen corner convergence.

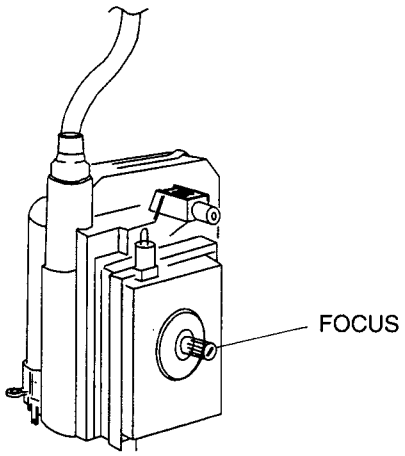
If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.





3-3. Focus

Adjust the focus to optimize the screen.



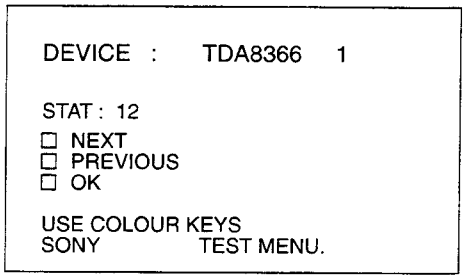
3-4. WHITE BALANCE

Screen G2 Setting

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its lowest level.
3. Apply 180V DC to the R,G, and B cathodes with an external power supply.
4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

White balance adjustment

1. Receive an all-white signal.
2. Enter into service mode. (Refer to the section 4 "Electrical Adjustment" on how to enter service mode.)
3. Select TDA8366 1 on menu.



4. Press the White button on the Remote Commander to enter into the device Menu.
5. Press the Red button 10 times "Next" "Next" "Next" to select HWB RED, adjust to 040.
6. Press the Red button to select HWB GREEN, adjust with the + and - menu buttons so that the white balance becomes optimum.
7. Press the Red button to select HWB BLUE, adjust with the + and - menu buttons so that the white balance becomes optimum.
8. Press the TV button twice on the Remote Commander to store the data and return to TV operation.

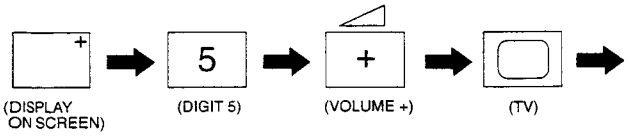
SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-833.

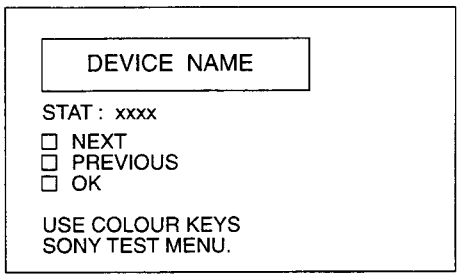
HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.

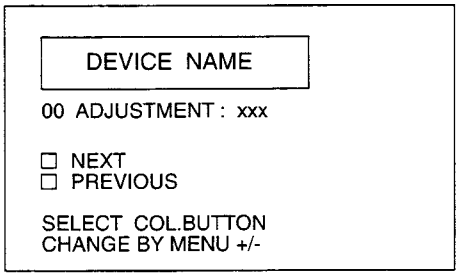


"TT " will appear in the top right corner of the screen. Other status information will also be displayed.

3. Press the MENU button on the Remote Commander to obtain the menu on the screen.



4. Press the Red (Next) and Green (Previous) buttons to select the device corresponding to the adjustment item from the table. Then press the White button (OK).



5. Press the Red (Next) or Green (previous) buttons to select the adjustment item. Then press the and buttons to change the data to comply with each standard.

6. Turn off the power to quit the service mode when adjustments are completed.

Initial Conditions for setup of TDA8366, TDA6612 and SAA7283. (Stereo Models Only)

TDA8366 1	INIT VALUE	TDA8366 2	INIT VALUE
Hue	31	Interlace	00
H Shift	Adj	Sync Mode	00
H Size	Adj	Col Dec	00
Pin Amp	Adj	Vert Div	00
Corn Pin	Adj	Vid ID	00
Tilt	Adj	EHT Track	01
V.Linear	Adj	En V Grd	00
V.Size	Adj	Serv Blk	00
S.Corr	Adj	OVP Mode	00
V.Cent	Adj	Aspect R	00
HWB Red	Adj	Start Freq	00
HWB Green	Adj	Y/C Input	00
HWB Blue	Adj	PAL/NTSC	00
Peaking	8	Xtal PLL	00
Bright	32	Y Delay	07
Colour	32	RGB Blk	00
Picture	37	Noise Cor	00
AGC Set	00	Fast Blk	01
Srce Sel 1	00	AFC Wind	00
Srce Sel 2	00	IF Sensty	00
Time Con	03	Mod Std	00
Xtal Ind	03	Vid Mute	01
FF Freq	02		

TDA6612	INIT VALUE	TDA6612	INIT VALUE
MPX Per	00	Mute 2	01
Quasi St	00	C1/2LS	00
Bass Exp	00	C1/2KH	00
H Pulse	00	Mono	01
Matrix St	00	Scart	00
Bypass	00	Scart D	00
Vol L Sp	07	AM	00
Vol R Sp	07	SAA7283	INIT VALUE
Vol HP	00	Mon M1/M2	01
Pll Sync	00	DM Select	01
Mute 3	01	SSWIT 123	07
Treble	08	Port 2	00
Bass	09	Mute Def	00
X Talk Adj	Adj	AMDIS	00
Mute 1	00	E Max	00
		E Min	01

4-2. TEST MODE 2 :

Is available by pressing Test button twice, OSD 'TT ' appears. The functions described below are available by pressing the two numbers. To release the Test Mode 2, press 0 twice, or switch the TV into Stand-by Mode.

00	switch Test Mode 2 off
01	picture maximum
02	picture minimum
03	Volume 35%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Ageing Condition (Volume min., Picture max., Brightness max.
08	Shipping Condition (Analog Values are RESET due to factory setting, Prog 1 is selected, TT Mode is switched off)
09	"Menu" Flag request
10	Tenth entry is deleted
11	dummy
12	dummy
13	dummy
14	Forced AV 16:9 detection on/off
15	Read factory setting from NVM Reads Volume, Balance, Treble, Bass, Brightness, Contrast, Hue, Sharpness, Colour values from ROM to the actual used values (Last Power Memory)
16	Save actual used values as RESET values Memorize actual used values Balance, Treble, Bass, Hue, Sharpness at RESET position in NVM.
17	Preset Label for AV Sources
18	RGB Priority on/off
19	Clear all preset labels
20	Tenth entry is deleted
21	Sub Contrast
22	Sub Colour
23	Sub Brightness
24	Set destination = U RGB Priority = Off
25	Set destination = D RGB Priority = Off
26	Set destination = B RGB Priority = On
27	Set destination = K RGB Priority = Off
28	Set destination = L RGB Priority = Off
29	Set destination = E RGB Priority = Off
30	Tenth entry is deleted
31	Set Destination = A RGB Priority = On
32	dummy
33	Auto AGC
34	N/S Pin Adjust
35	Manual AGC Adjust
36	dummy
37	dummy
38	dummy
39	dummy
40	Tenth entry is deleted
41	Re-initialise NVM
42	Production use only
43	Initialise Geom Settings
44	Initialise all favorite pages = 100
45	Channel locks = off
46	IR Channel Pressetting Mode The channel pressetting can be done by a Special IR Transmitter (Ver 2 and above software only)
47	dummy
48	Set NVM testbyte to 44h
49	Erase the NVM Testbyte (this byte detects already stored NVM's) After selecting this function, switch TV Off and On -> the NVM will be preset by µ-Controller.

In Test Mode the Menu display is switchable by the Speaker-Off button.

Note : For Test Modes 41 - 49 it is necessary to ensure that the TV is set to Prog 59.

SUB BRIGHTNESS ADJUSTMENT

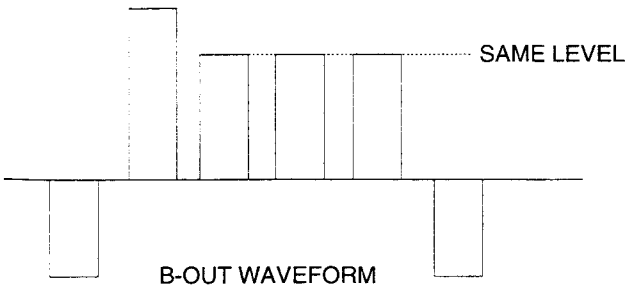
1. Input a Phillips pattern.
2. Enter into service mode and press 23.
3. Adjust data so that 0-IRE of grey scale and CUT-OFF 20-IRE are only slightly visible on screen.

SUB CONTRAST ADJUSTMENT

1. Input a video that contains a small 100% area on a Black Background.
2. Enter into service mode and press 01 to have PIC max followed by 21.
3. Connect oscilloscope to pin (1) of CN703 (R OUT) and adjust HWB Red data of TDA8366 1 to obtain 2.3Vp-p.

SUB COLOR ADJUSTMENT

1. Input a PAL color bar signal.
2. Connect an oscilloscope to pin (3) of CN703 (B OUT) on the C board.
3. Enter into service mode and press 22.
4. Adjust data so that the right sides of the waveform are set to the same level.



STEREO SEPARATION ADJUSTMENT

1. Input a 1KHz stereo signal to the L-ch and a 400Hz stereo signal to the R-ch.
2. Enter into service mode and select the "Test Menu" to be TDA6612.
3. Select the Stereo Xtalk Adjustment Menu, by using the Red (Next) and Green (Previous) buttons.
4. Monitor the Scart 1 L-channel output and adjust the data so that the R-channel sound is not detected in the L-channel.

I.F. COIL ADJUSTMENT (T101) - B/G, D/K, I AND L STANDARD FOR CONTINENTAL MODELS.

1. Apply a 38.9MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for negative modulation.
3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

I.F. COIL ADJUSTMENT (T101) - I, STANDARD FOR U.K. MODELS.

1. Apply a 39.5MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for negative modulation.
3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

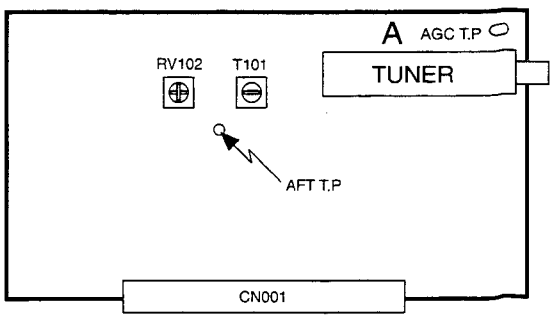
L, BAND 1 ADJUSTMENT (RV102) - L, STANDARD FOR FRENCH MODELS.

1. Apply a 33.95MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for positive modulation and system L band 1.
3. Measure the voltage at the AFT test point and adjust (RV102) to obtain 2.4V +/- 0.2V.

Note : Only adjust RV102 after T101 has been correctly adjusted.

AGC ADJUSTMENT

1. Receive an off- air signal.
2. Enter the service mode, ("Test" "Test") and 35.
3. Adjust the data so that there is no snow or cross - modulation visible on the screen.
4. Change the receiving off-air channel, and confirm the above status.



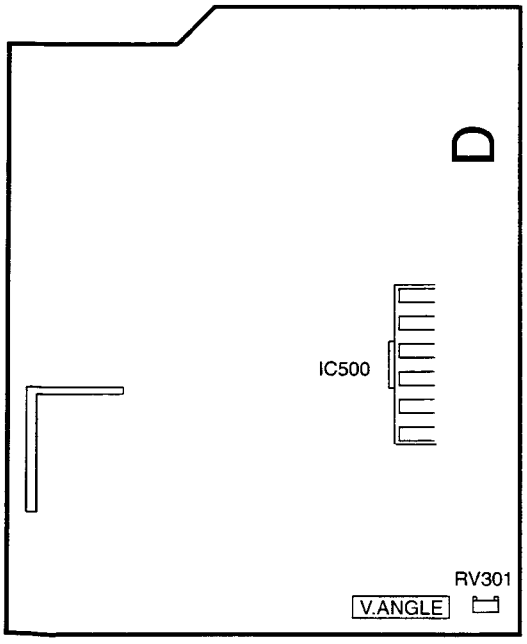
- A Board component side -

DEFLECTION SYSTEM ADJUSTMENT

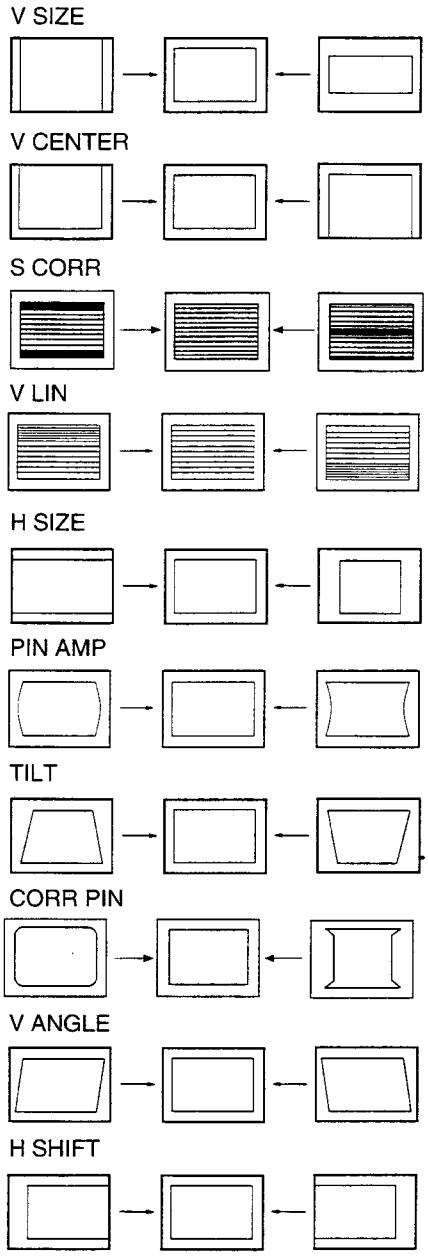
1. Enter into service mode.
2. Select and adjust each item in order to obtain the optimum image.

Item No	Adjustment item.	Data Amount
03	H SHIFT	ADJ.
04	H SIZE	ADJ.
05	PIN AMP	ADJ.
06	CORR PIN	ADJ.
07	TILT	ADJ.
08	V LINEAR	ADJ.
09	V SIZE	ADJ.
0A	S CORR	ADJ.
0B	V CENTER	ADJ.

Note : V ANGLE is adjusted by a Variable Resistor on the 'D' Board (RV301)



- D Board Component Side -



4-3. BE3 SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-3 chassis is triggered in 1 of 2 ways :- 1: Bus busy or 2: Device failiure to respond to IIC. In the event of one of these situations arrising the software will first try to release the bus if busy (Failiure to do so will report with continous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the led (Series of flashes which must be counted) See Table 1., on fatal errors are reported with this method.

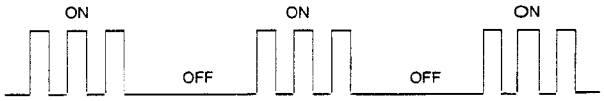
If a fatal error is found the set will simply stay in whichever state it was when the error occured, but if a non fatal error occurs the set will try to continue operation.

Table 1

Device	LED Error Count	Fatal Error
NVM	2 .. 9	√
Teletext	10	
Jungle	11	√
Video_sw	12	
Tuner	13	√
Nicam	14	
Audio_cont	15	√

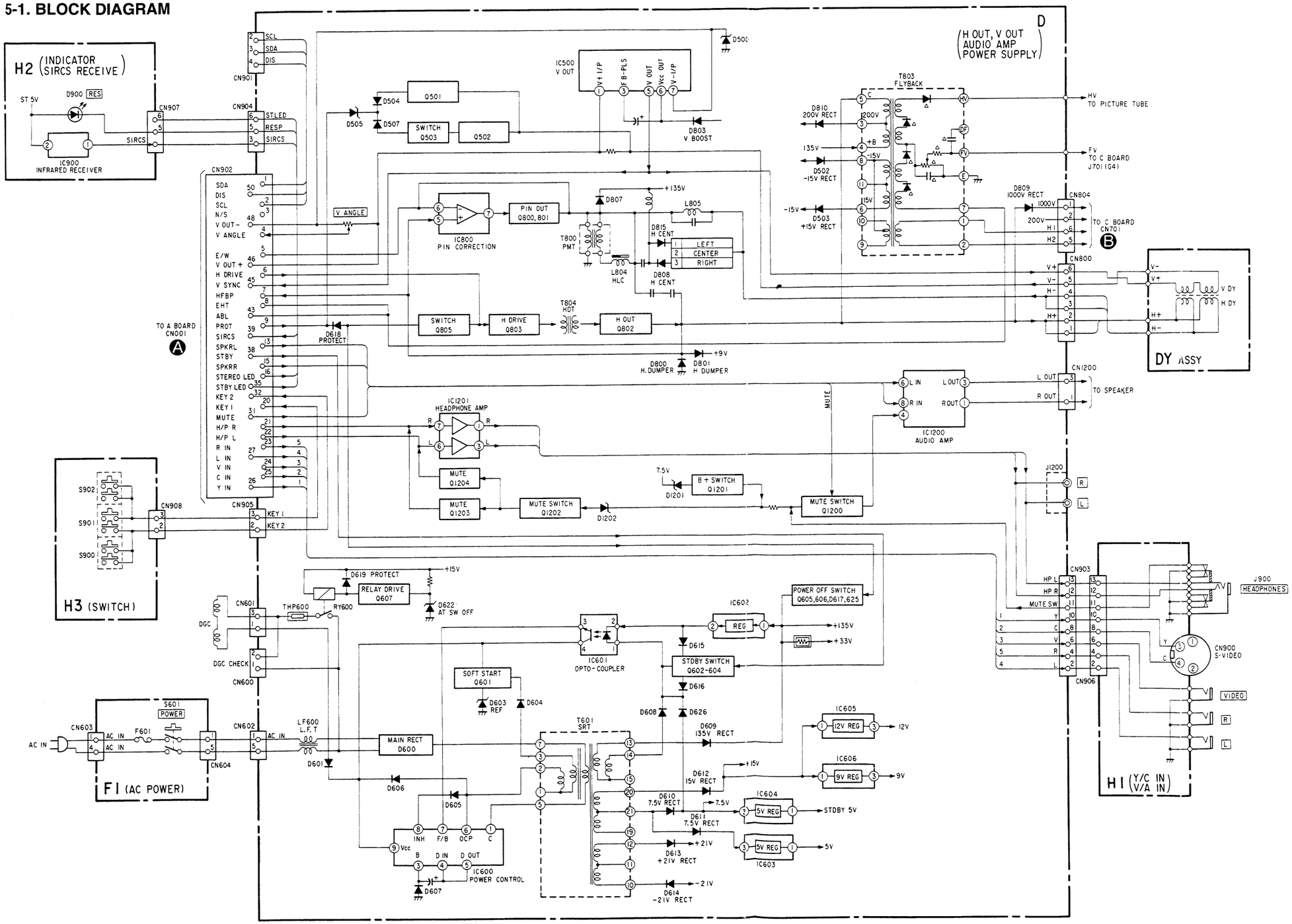
Flash Timing Example : e.g. error number 3.

Stby LED



SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM



D

(H OUT, V OUT
AUDIO AMP
POWER SUPPLY)

T803
FLYBACK

D500

D810
200V RECT

D803
V BOOST

D502
-15V RECT

D503
+15V RECT

D809
1000V RECT

HV
TO PICTURE TUBE

FV
TO C BOARD
J701 (G4)

CN804

TO C BOARD
CN701

B

CN800

V DY

H DY

DY ASSY

L805

D801
H DUMPER

CN1200

TO SPEAKER

IC1200
AUDIO AMP

MUTE

B + SWITCH
Q1201

D1201

MUTE SWITCH
Q1200

J1200

R

L

POWER OFF SWITCH
Q605,606,D617,625

IC602
REG

D615

STDBY SWITCH
Q602-604

D616

D626

D609
135V RECT

IC605
12V REG

12V

D612
15V RECT

IC606
9V REG

9V

D610
5V RECT

D611
7.5V RECT

IC604
5V REG

STDBY 5V

D613
+21V RECT

IC603
5V REG

5V

D614
-21V RECT

CN903

CN906

J900
HEADPHONES

CN900
S-VIDEO

VIDEO

HI (Y/C IN
V/A IN)

IC101
VIF/SIF

RF IN

IF AMP
Q102

SAWF
SWF101

SAWF
SWF102

D101
33V REG

TU101

SWITCH
Q134

BUFFER
Q107

D103

CF103

CF104

CF106

MUTE
Q116,117

MUTE
Q123,124

AGC MONI

AGC DEFEAT

MUTE

VIDEO AMP
Q132,131

T101
77.8MHz

CF102

AFT

AGC ADJ

SYS

BUFFER
Q130

BUFFER
Q133

IC202
SYNC SEP

SYNC SEP

PHASE
COMP

H OSC

SYNC AMP
Q120

OSC BUFFER
Q114

IC201
AUDIO SELECT

BUFFER
Q108

BUFFER
Q109

SDA/SCL

IC1002
VIDEO PROCESSER

SYNC BUFFER
Q1001

IC1001

X1001
13.875MHz

IC1003
RGB SW

IC302

IC303

IC
JUN

INT CVBS IN

SECAM REF

SCP OUT

VID. OUT

R-Y OUT

B-Y OUT

B-Y IN

R-Y IN

HFLB IN

EXT CUBS IN

CUBS OUT

SUHS-Y

SUHS-C

R

G

B

FB

AGC OUT

J401
1/2

J401
2/2

R OUT
R IN
L OUT
L IN
B
MODE
G
R
BLK
V OUT
V IN
C IN
Y IN

IC401
A/V SELECT

V BUFFER
Q403

BUFFER
Q402

VIDEO BUFFER
Q404

AGC ADJ/AFT/SYS

SDA/SCL/AGC MONI/AGC/MUTE

BLK

D1002
SWITCH

BLK BUFFER
Q406

RGB PROT
Q401

IC
MICRO C

CO IN

RESET

AGC ADJ

AFT

SYS

AGC MON

SDA

SCL

BG/IDKL

RGB SWITCH

H SYNC

RGB P

RGB

BLK

SWITCH
Q12

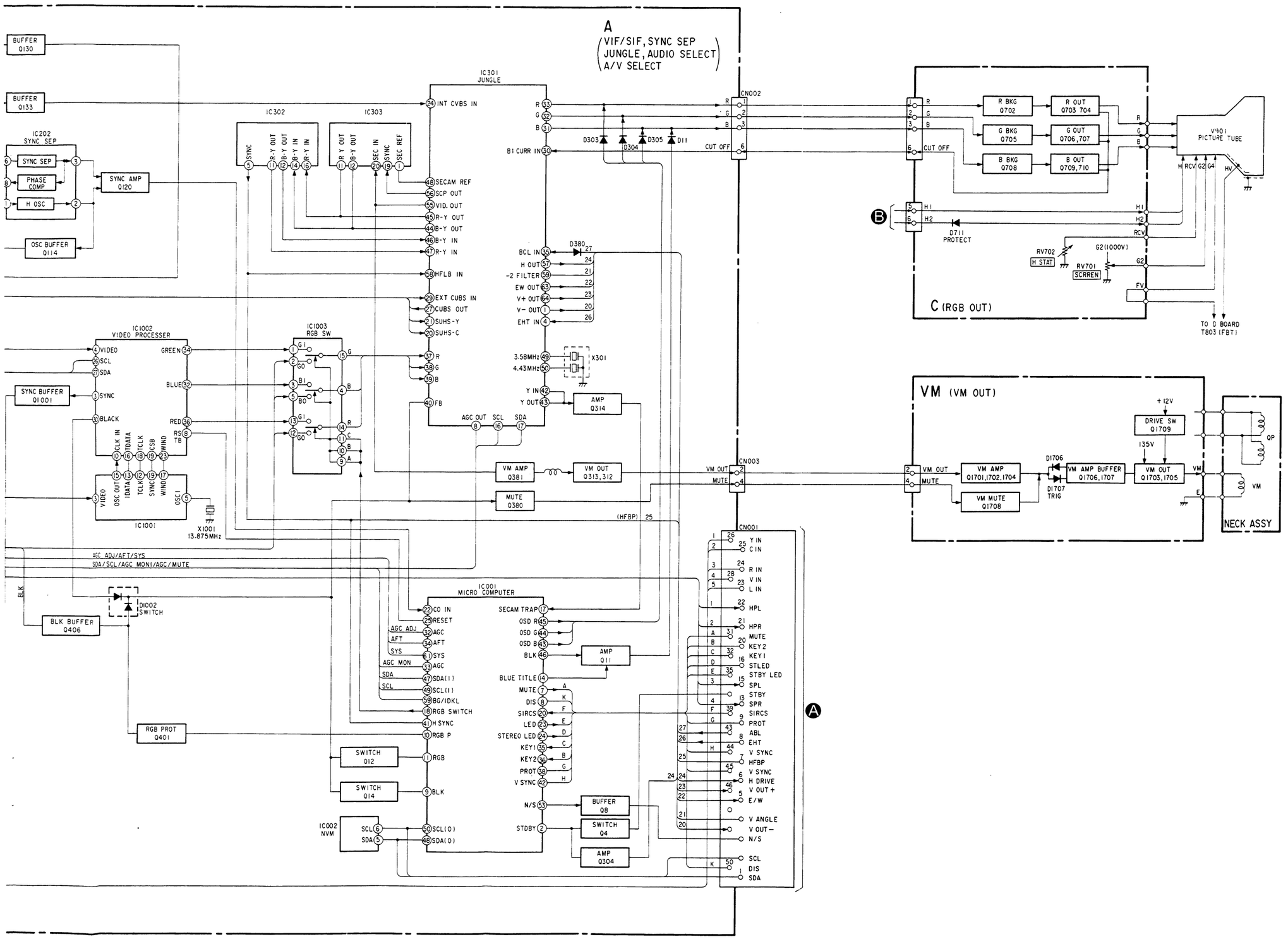
SWITCH
Q14

IC002
NVM

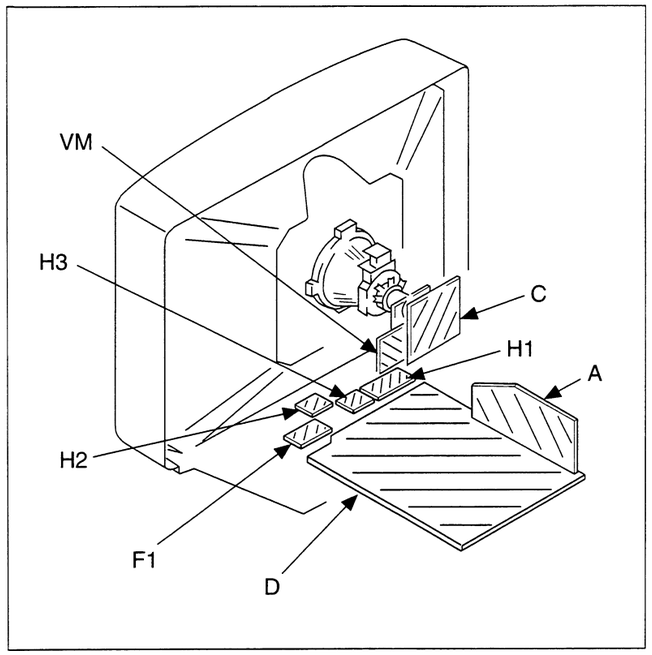
SCL(O)

SDA(O)

KV-C298


A
(VIF/SIF, SYNC SEP
JUNGLE, AUDIO SELECT
A/V SELECT)
BUFFER Q130
BUFFER Q133
IC202 SYNC SEP
SYNC SEP
PHASE COMP
H OSC
SYNC AMP Q120
OSC BUFFER Q114
IC301 JUNGLE
INT CVBS IN
IC302
IC303
SECAM REF
SCP OUT
VID. OUT
R-Y OUT
B-Y OUT
B-Y IN
R-Y IN
HFLB IN
EXT CUBS IN
CUBS OUT
SUHS-Y
SUHS-C
BCL IN
H OUT
-2 FILTER
EW OUT
V+ OUT
V- OUT
EHT IN
3.58MHz
4.43MHz
X301
Y IN
Y OUT
AMP Q314
AGC OUT
SCL
SDA
D303
D304
D305
D11
B1 CURR IN
CUT OFF
D380
CN002
IC1002 VIDEO PROCESSER
VIDEO
SCL
SDA
SYNC
BLACK
GREEN
BLUE
RED
RSTB
CLK IN
IDATA
TCLK
CSB
WIND
OSC OUT
OSCI
IC1003 RGB SW
SYNC BUFFER Q1001
IC1001
X1001
13.875MHz
VM AMP Q381
VM OUT Q313,312
MUTE Q380
CN003
VM OUT
MUTE
(HFBP)
CN001
AGC ADJ/AFT/SYS
SDA/SCL/AGC MONI/AGC/MUTE
BLK
D1002 SWITCH
BLK BUFFER Q406
IC001 MICRO COMPUTER
CO IN
RESET
AGC ADJ
AGC
AFT
SYS
AGC MON
SDA(1)
SCL(1)
BG/IDKL
RGB SWITCH
H SYNC
RGB P
RGB
BLK
SECAM TRAP
OSD R
OSD G
OSD B
BLK
BLUE TITLE
MUTE
DIS
SIRCS
LED
STEREO LED
KEY1
KEY2
PROT
V SYNC
N/S
STDBY
AMP Q11
BUFFER Q8
SWITCH Q4
AMP Q304
SWITCH Q12
SWITCH Q14
RGB PROT Q401
IC002 NVM
SCL
SDA
SCL(0)
SDA(0)
Y IN
C IN
R IN
V IN
L IN
HPL
HPR
MUTE
KEY2
KEY1
STLED
STBY LED
SPL
STBY
SPR
SIRCS
PROT
ABL
EHT
V SYNC
HFBP
V SYNC
H DRIVE
V OUT +
E/W
V ANGLE
V OUT –
N/S
SCL
DIS
SDA
R BKG Q702
R OUT Q703 704
G BKG Q705
G OUT Q706,707
B BKG Q708
B OUT Q709,710
V901 PICTURE TUBE
D711 PROTECT
RV702 H STAT
RV701 SCRREN
G2(1000V)
C (RGB OUT)
TO D BOARD T803 (FBT)
VM (VM OUT)
+12V
DRIVE SW Q1709
135V
VM AMP Q1701,1702,1704
VM MUTE Q1708
D1706
D1707 TRIG
VM AMP BUFFER Q1706,1707
VM OUT Q1703,1705
QP
VM
NECK ASSY

5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted.
  pF : μμF 50WV or less are not indicated except for electrolytic.
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

Pitch : 5mm
Rating electrical power : ¼W

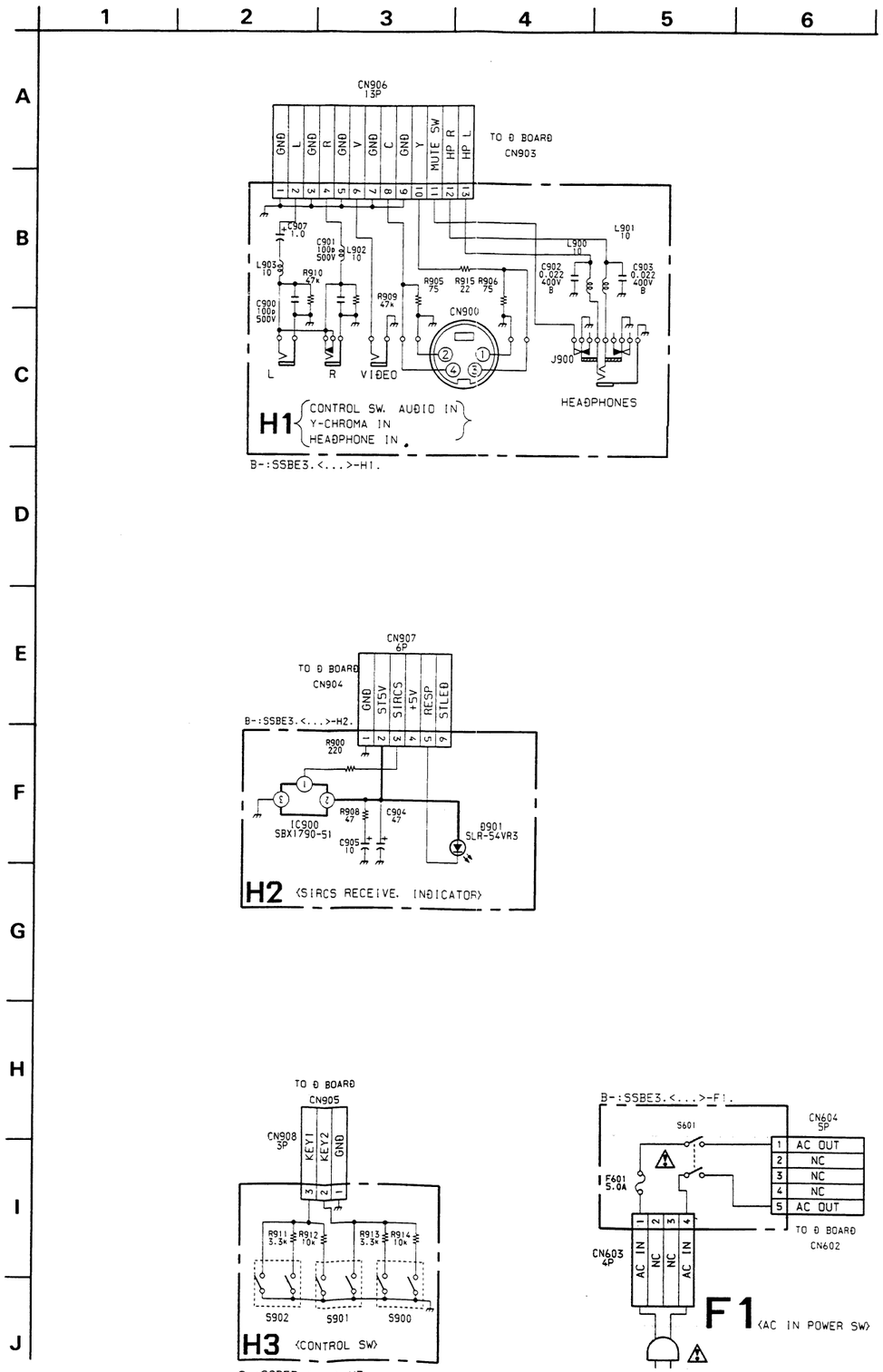
- Chip resistor is in 1/10W.
- All resistors are in ohms.
  kΩ = 1000Ω, MΩ = 1000KΩ
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have charactristic curve B, unless otherwise noted.
- All voltages are in V.
- Readings are taken with a 10MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- : B+ bus.
- : B− bus.
- : signal path.(RF)
- : earth - ground
- : earth - chassis

Reference information

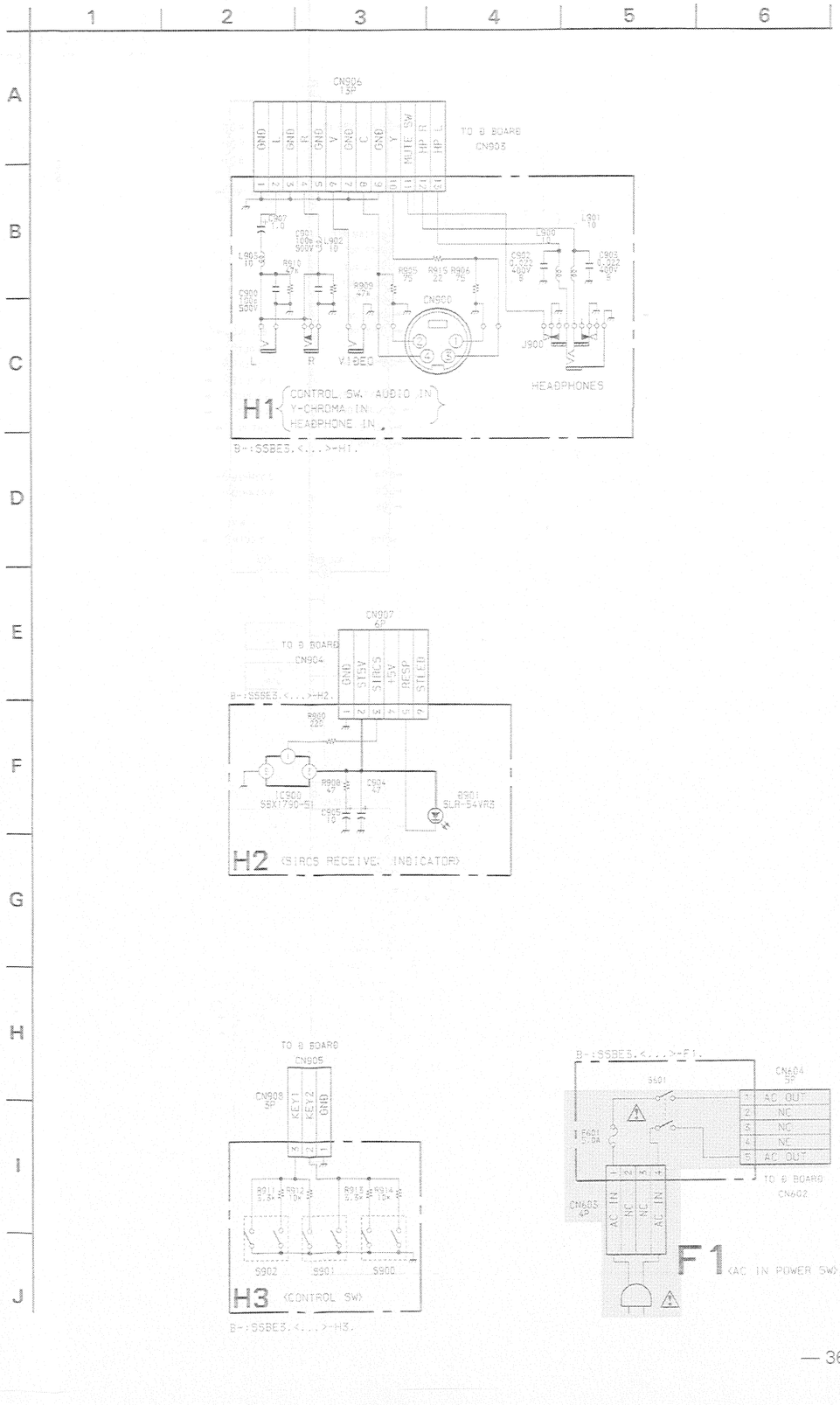
RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NONFLAMMABLE CARBON
	FUSE	: NONFLAMMABLE FUSIBLE
	RS	: NONFLAMMABLE METAL OXIDE
	RB	: NONFLAMMABLE CEMENT
	RW	: NONFLAMMABLE WIREWOUND
	※	: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

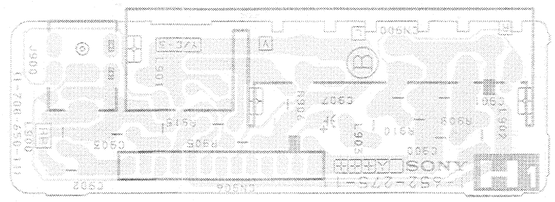
Note: Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.



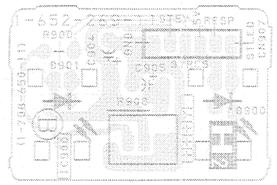
H1 [CONTROL SW, AUDIO IN Y-CHROMA IN, HEADPHONE IN] **H2** [SIRCS RECEIVE INDICATOR] **H3** [CONTROL SW] **F1** [AC IN POWER SW] **D** [HV OU PIN OU POWE



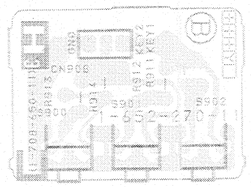
– H1 BOARD –



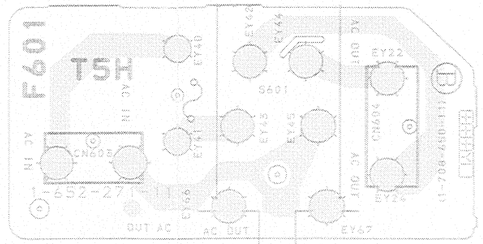
– H2 BOARD –



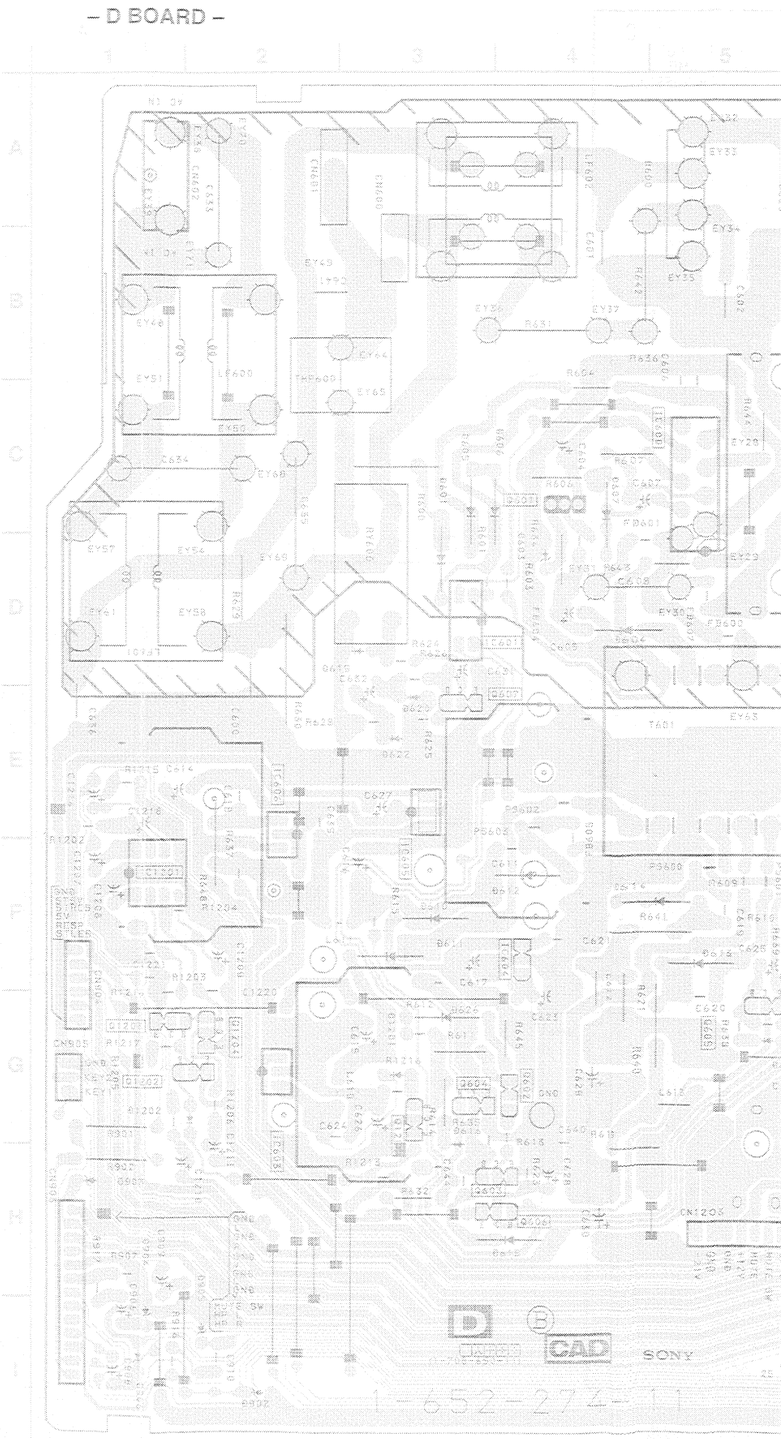
– H3 BOARD –



– F1 BOARD –

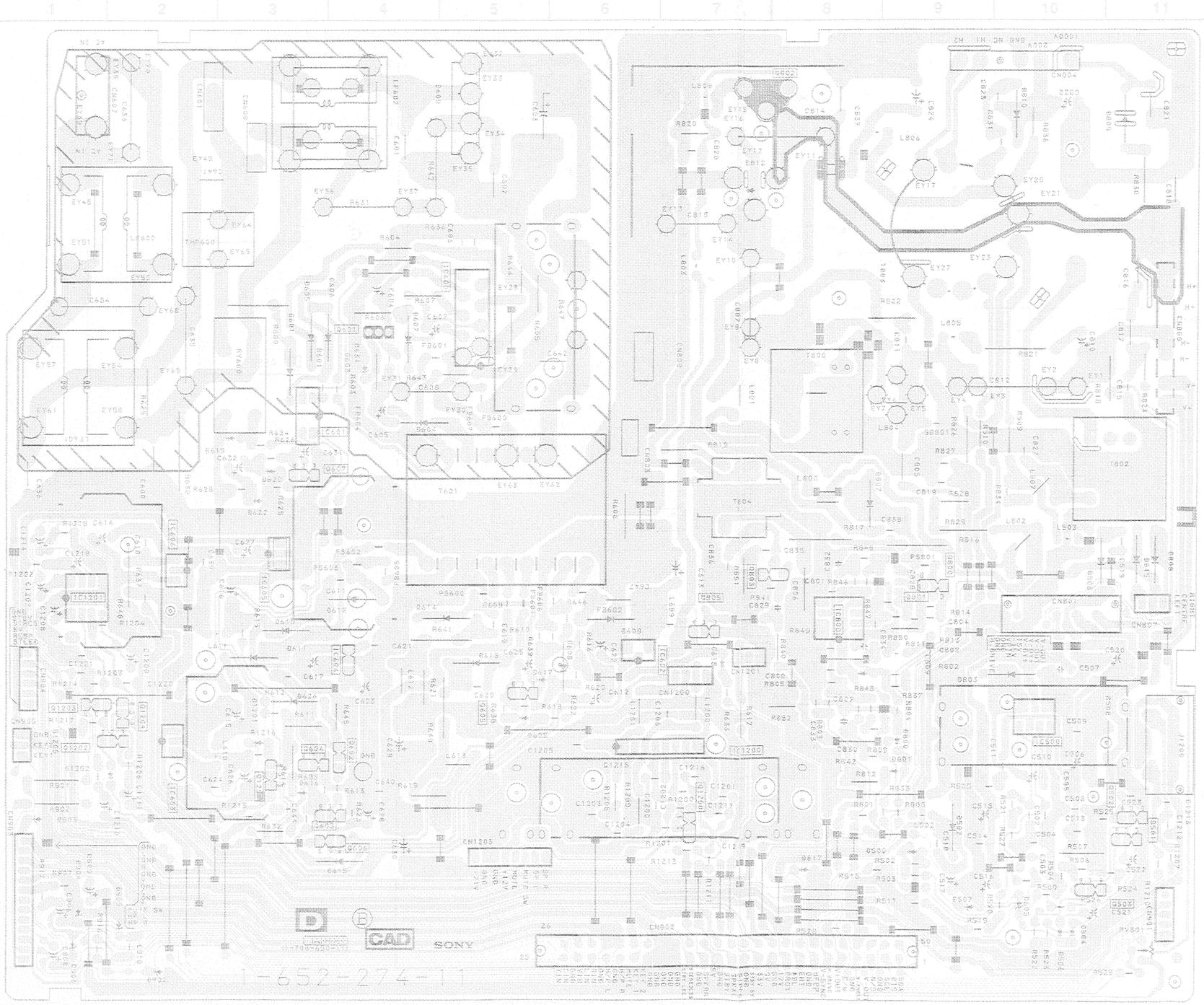


– D BOARD –



2 [SIRCS RECEIVE INDICATOR] H3 [CONTROL SW] F1 [AC IN POWER SW] D [HV OUT PIN OUT POWER SUPPLY]

– D BOARD –

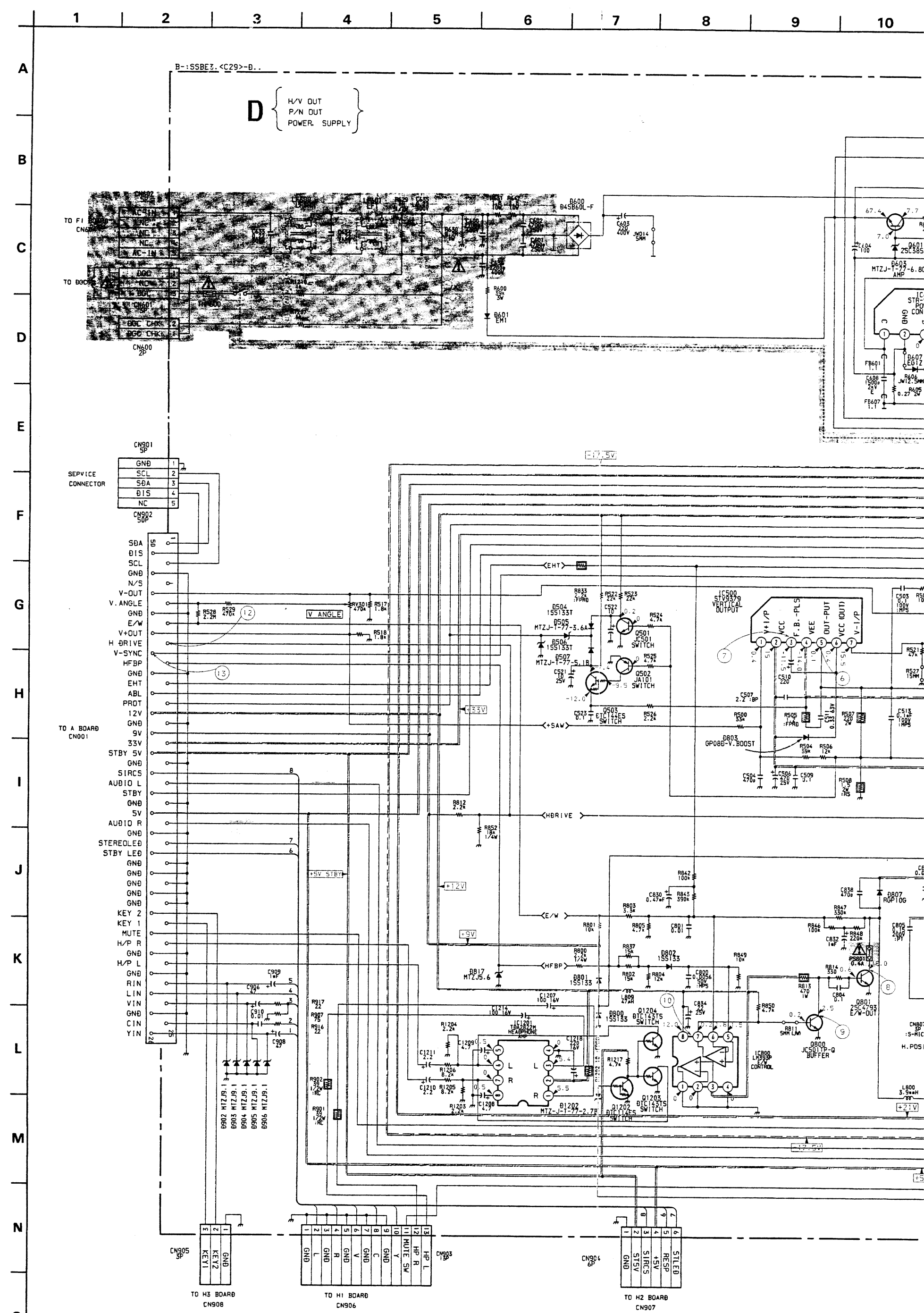


NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

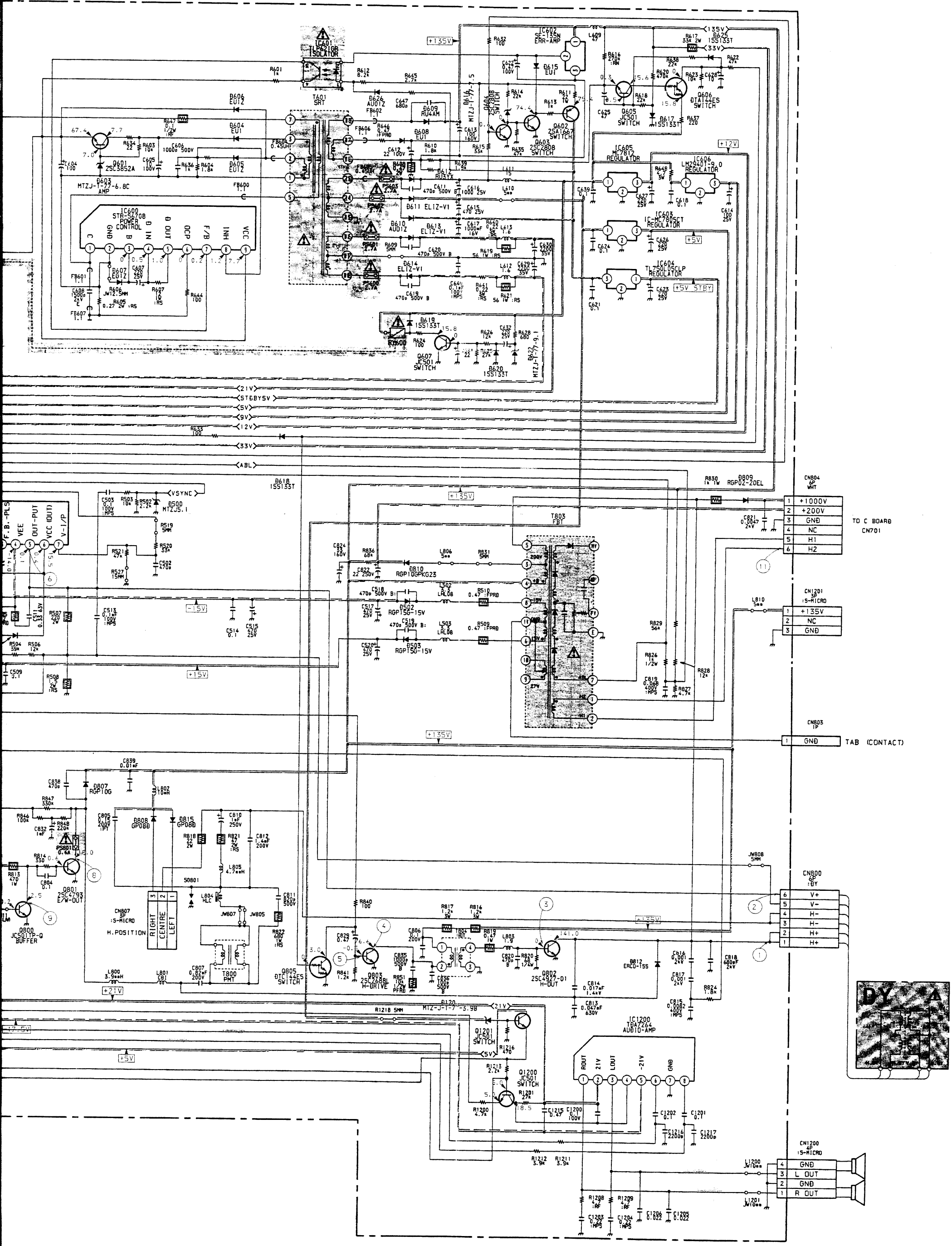
IC	
IC500	G - 10
IC600	C - 5
IC601	D - 4
IC602	F - 7
IC603	H - 2
IC604	F - 4
IC605	F - 3
IC606	E - 2
IC800	F - 8
IC1200	G - 7
IC1201	F - 1

TRANSISTOR	
Q501	H - 11
Q502	H - 11
Q503	I - 11
Q601	C - 4
Q602	G - 4
Q603	H - 3
Q604	G - 3
Q605	G - 5
Q606	H - 4
Q607	E - 4
Q800	E - 9
Q801	F - 9
Q802	A - 8
Q803	F - 7
Q805	F - 7
Q1200	H - 7

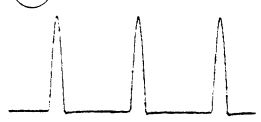
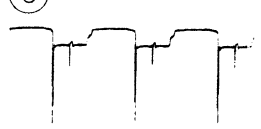
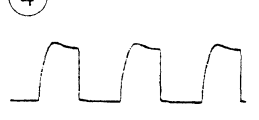
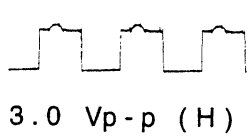
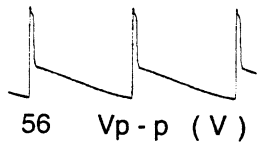
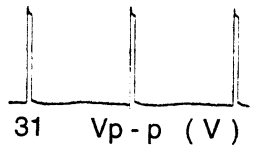
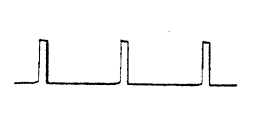
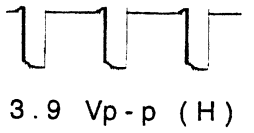
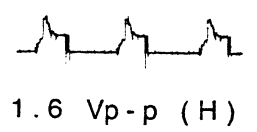
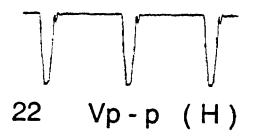
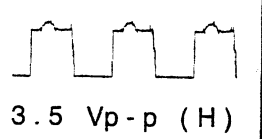
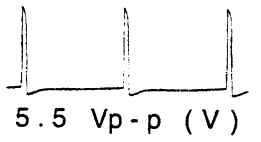
DIODE	
D500	G - 9
D502	G - 9
D503	F - 10
D504	I - 10
D505	I - 10
D506	I - 10
D507	G - 9
D600	A - 4
D601	C - 3
D603	D - 4
D604	D - 4
D605	C - 3
D606	C - 4
D607	C - 4
D608	F - 6
D609	F - 6
D610	F - 3
D611	F - 3
D612	F - 4
D613	F - 5
D614	F - 4
D615	H - 4
D616	G - 3
D617	F - 5
D618	F - 7
D619	D - 2
D620	E - 3
D622	E - 3
D625	G - 5
D626	G - 3
D800	G - 9
D801	G - 9
D802	F - 9
D803	F - 9
D807	E - 9
D808	E - 11
D809	A - 11
D810	A - 10
D812	B - 7
D815	E - 11
D817	H - 8
D902	I - 2
D903	H - 1
D904	H - 1
D905	H - 2
D906	I - 1

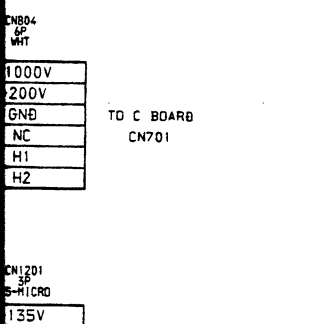

1 2 3 4 5 6 7 8 9 10
A B C D E F G H I J K L M N O
B-:SSBE3.<C29>-B..
D
H/V OUT
P/N OUT
POWER SUPPLY
CN902 5P
CN600 2P
TO F! BOARD CN6
TO BGC BOARD
D600 D4SB60L-F
C603 220 400V
JW014 5MM
R600 39k 3W
D601 EM1
CN901 5P
SEPVICE CONNECTOR
GND 1
SCL 2
SDA 3
DIS 4
NC 5
CN902 50P
SDA
DIS
SCL
GND
N/S
V-OUT
V. ANGLE
GND
E/W
V+OUT
H DRIVE
V-SYNC
HFBP
GND
EHT
ABL
PROT
12V
GND
9V
33V
STBY 5V
GND
SIRCS
AUDIO L
STBY
GND
5V
AUDIO R
GND
STEREOLED
STBY LED
GND
GND
GND
GND
GND
KEY 2
KEY 1
MUTE
H/P R
GND
H/P L
GND
RIN
LIN
VIN
GND
CIN
YIN
TO A BOARD CN001
V ANGLE
+17.5V
+33V
+SAW
+5V STBY
+12V
+9V
HDRIVE
E/W
HFBP
EHT
D504 1SS133T
D505 MTZJ-T-77-3.6A
D506 1SS133T
D507 MTZJ-T-77-5.1B
Q501 JC501 SWITCH
Q502 JA101 SWITCH
Q503 DTC144ES SWITCH
IC500 STV9379 VERTICAL OUTPUT
V+1/P
VCC
F.B.-PLS
VEE
OUT-PUT
VCC (OUT)
V-1/P
D803 GP08D-V.BOOST
D802 1SS133
D817 MTZJ5.6
D801 1SS133
D800 1SS133
Q1204 DTC143TS SWITCH
Q1203 DTC143TS SWITCH
Q1202 DTC114ES SWITCH
IC1201 TDA2822M HEADPHONE AMP
D1202 MTZ-J-T-77-2.7B
IC800 LM393P E/W CONTROL
Q800 JC501TP-Q BUFFER
Q801 2SC4793 E/W-OUT
D902 MTZJ9.1
D903 MTZJ9.1
D904 MTZJ9.1
D905 MTZJ9.1
D906 MTZJ9.1
CN905 3P
KEY1
KEY2
GND
TO H3 BOARD CN908
CN903 13P
GND
L
GND
R
GND
V
GND
C
GND
Y
MUTE SW
HP R
HP L
TO H1 BOARD CN906
CN904 6P
GND
ST5V
SIRCS
+5V
RESP
STLED
TO H2 BOARD CN907

9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20

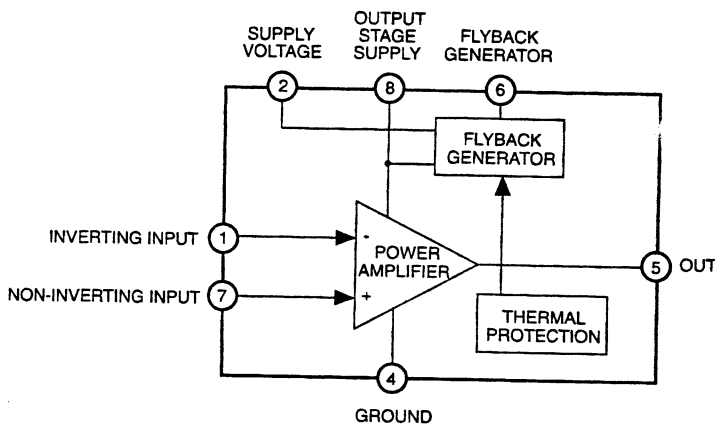


WAVEFORMS D BOARD

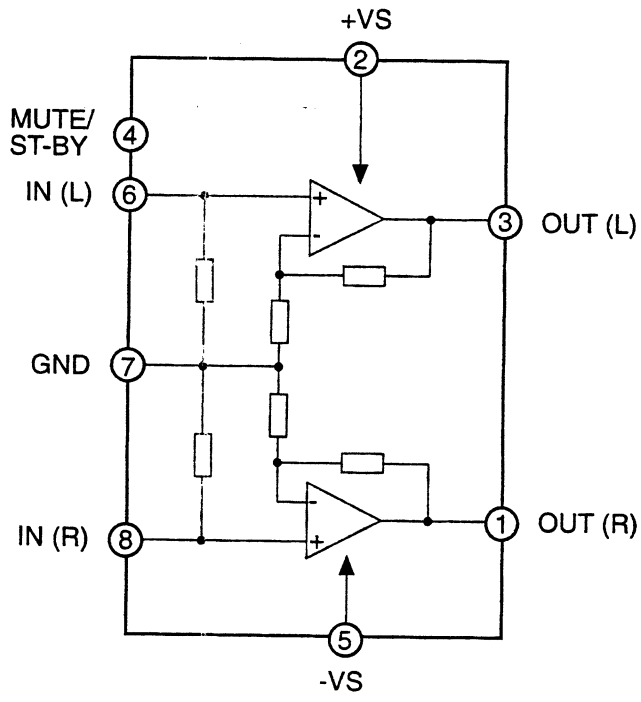
①  1.2K Vp-p (H)	② 56.0 Vp-p (V)	③  11.7 Vp-p (H)	④  181 Vp-p (H)
⑤  3.0 Vp-p (H)	⑥  56 Vp-p (V)	⑦  31 Vp-p (V)	⑧  140 Vp-p (H)
⑨  3.9 Vp-p (H)	⑩  1.6 Vp-p (H)	⑪  22 Vp-p (H)	⑫  3.5 Vp-p (H)
⑬  5.5 Vp-p (V)			



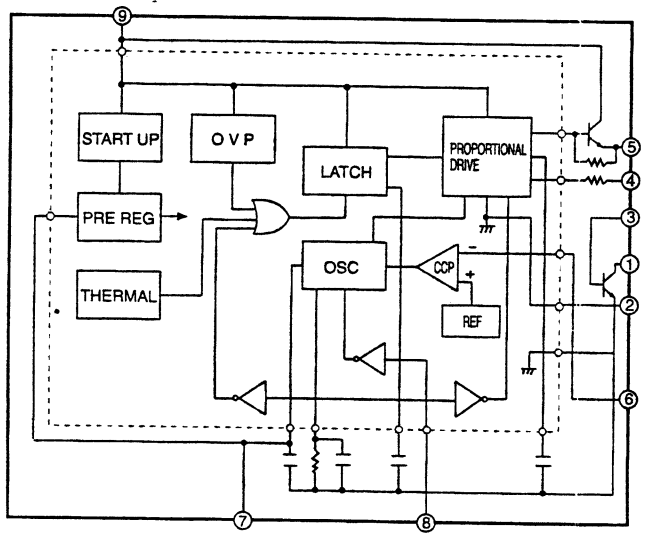
D BOARD IC500 STV9379

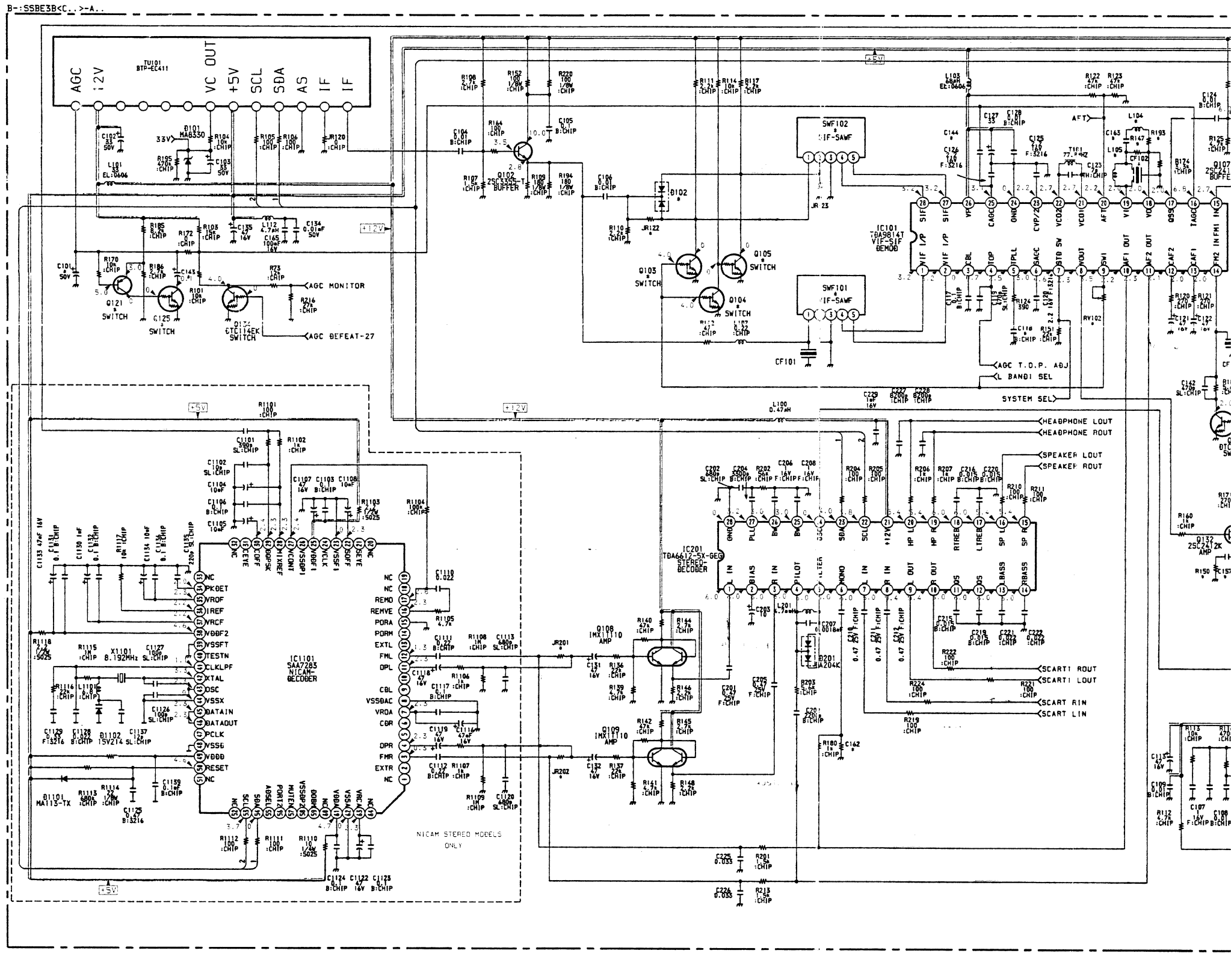


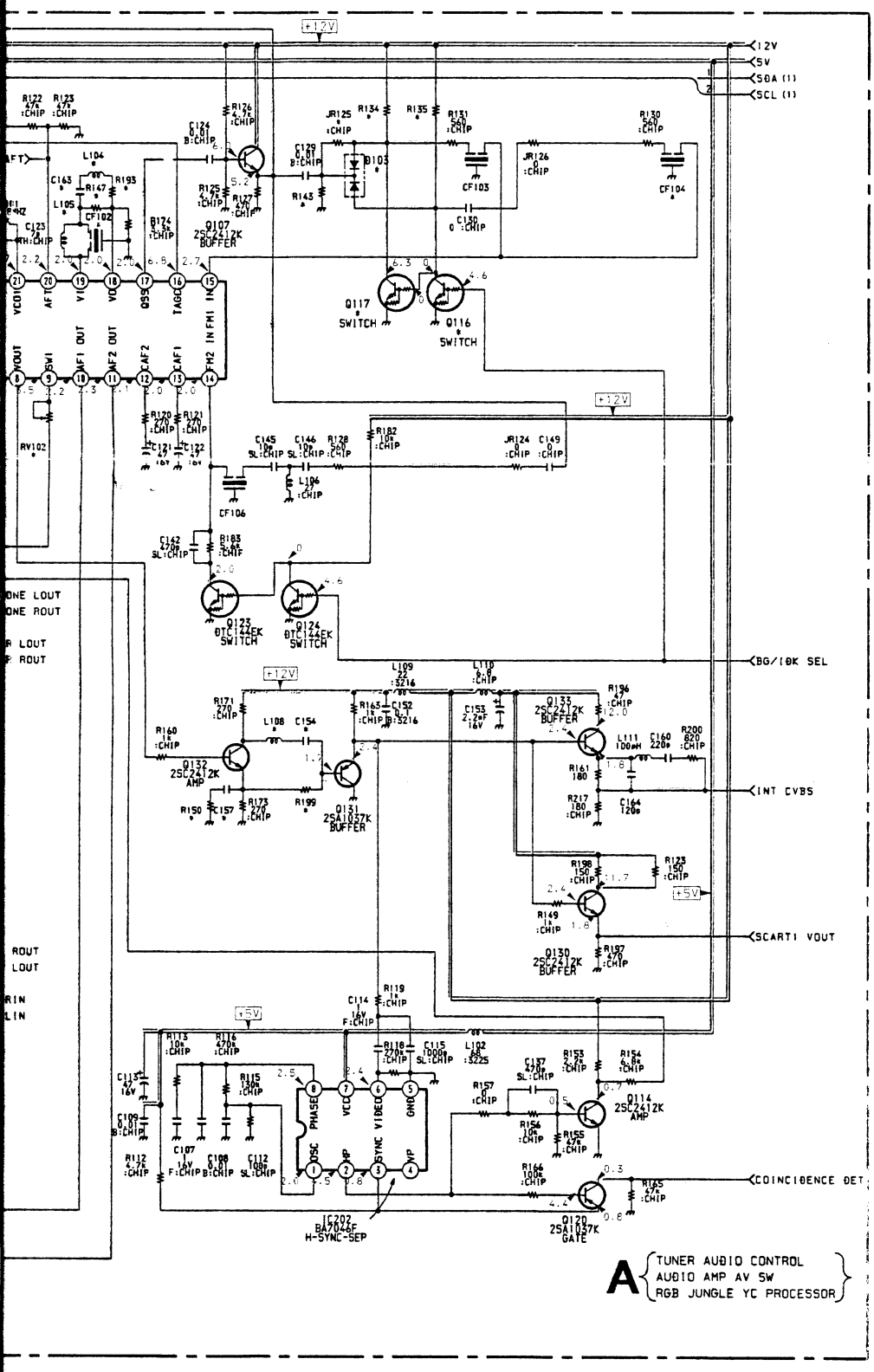
D BOARD IC1200 TDA7264

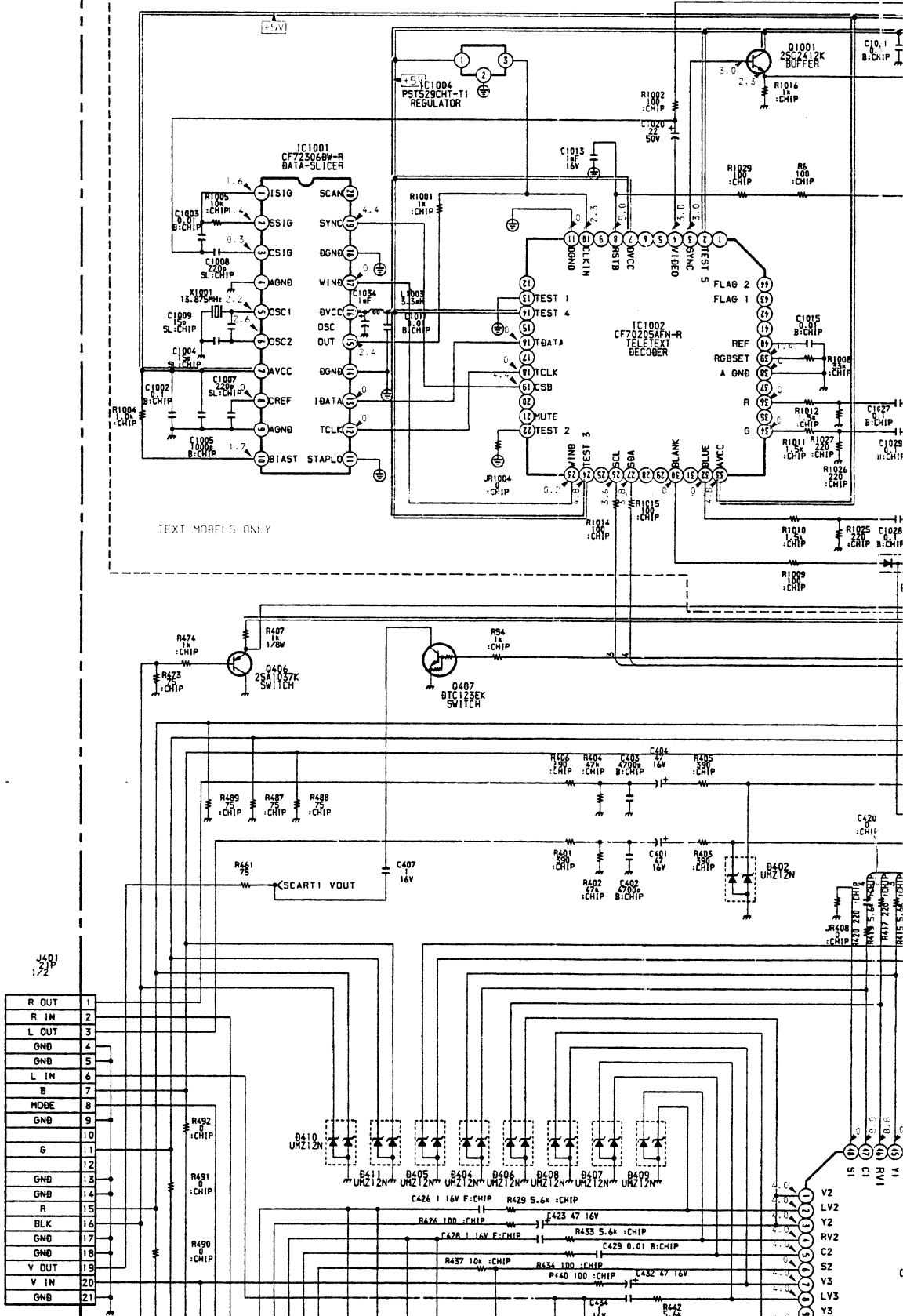


D BOARD IC600 STR-S6708




TU101 BTP-EC411
AGC
+12V
VC OUT
+5V
SCL
SDA
AS
IF
IF
IC1101 SAA7285 NICAM-DECODER
IC201 TDA6617Z-5X-GEG STEREO-DECODER
SWF102 IF-SAWF
SWF101 IF-SAWF
IC101 TDA9814T VIF-SIF DEMOD
Q108 IMX1T110 AMP
Q109 IMX1T110 AMP
Q102 2SC3356-T BUFFER
Q107 2SC2412K BUFFER
Q132 2SC2412K AMP
Q103 SWITCH
Q104 SWITCH
Q105 SWITCH
Q121 SWITCH
Q125 SWITCH
Q134 DTC114EK SWITCH
AGC MONITOR
AGC DEFEAT-27
AGC T.D.P. ADJ
L BAND1 SEL
SYSTEM SEL
HEADPHONE LOUT
HEADPHONE ROUT
SPEAKER LOUT
SPEAKER ROUT
SCART1 ROUT
SCART1 LOUT
SCART RIN
SCART LIN
NICAM STEREO MODELS ONLY

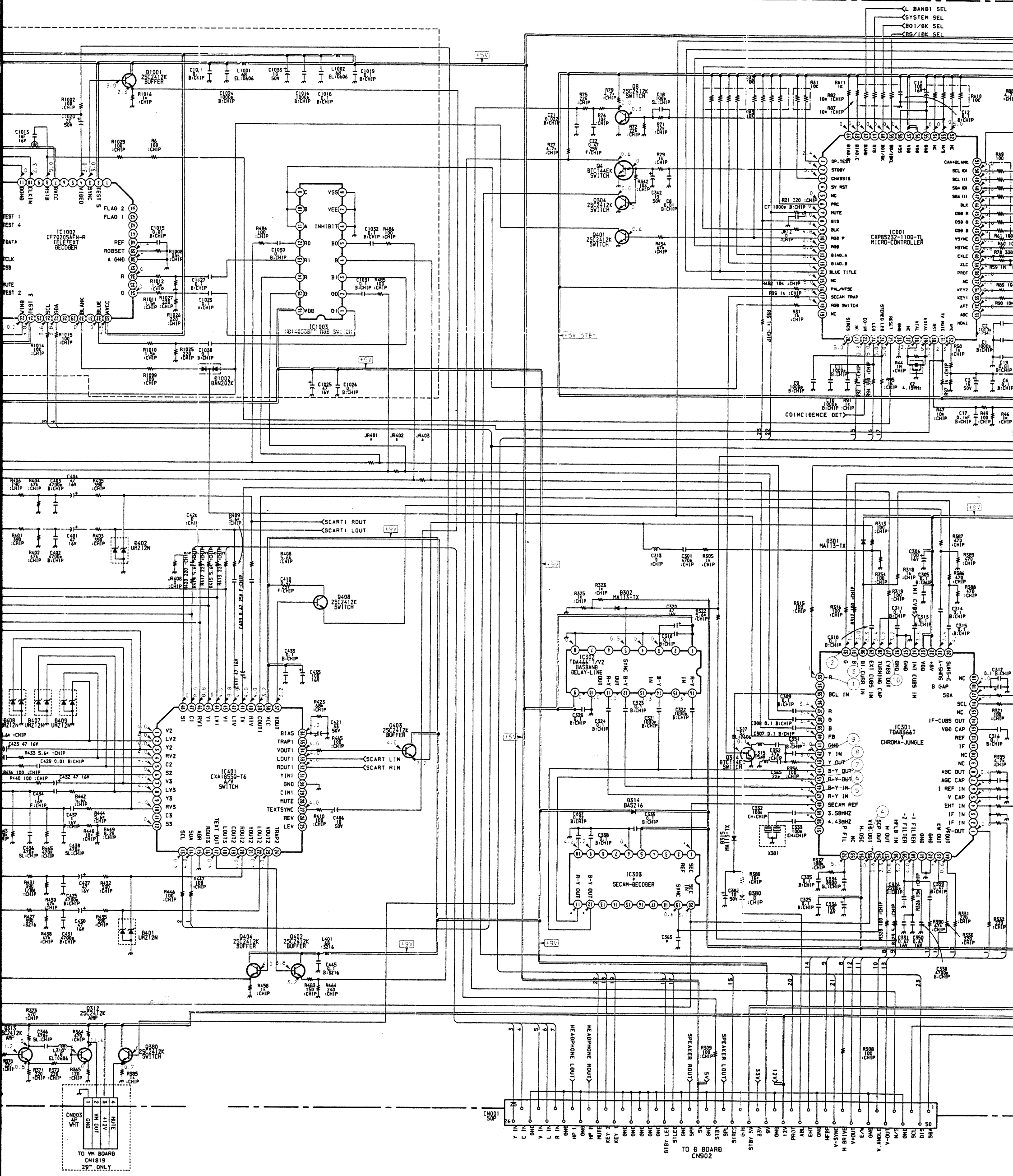


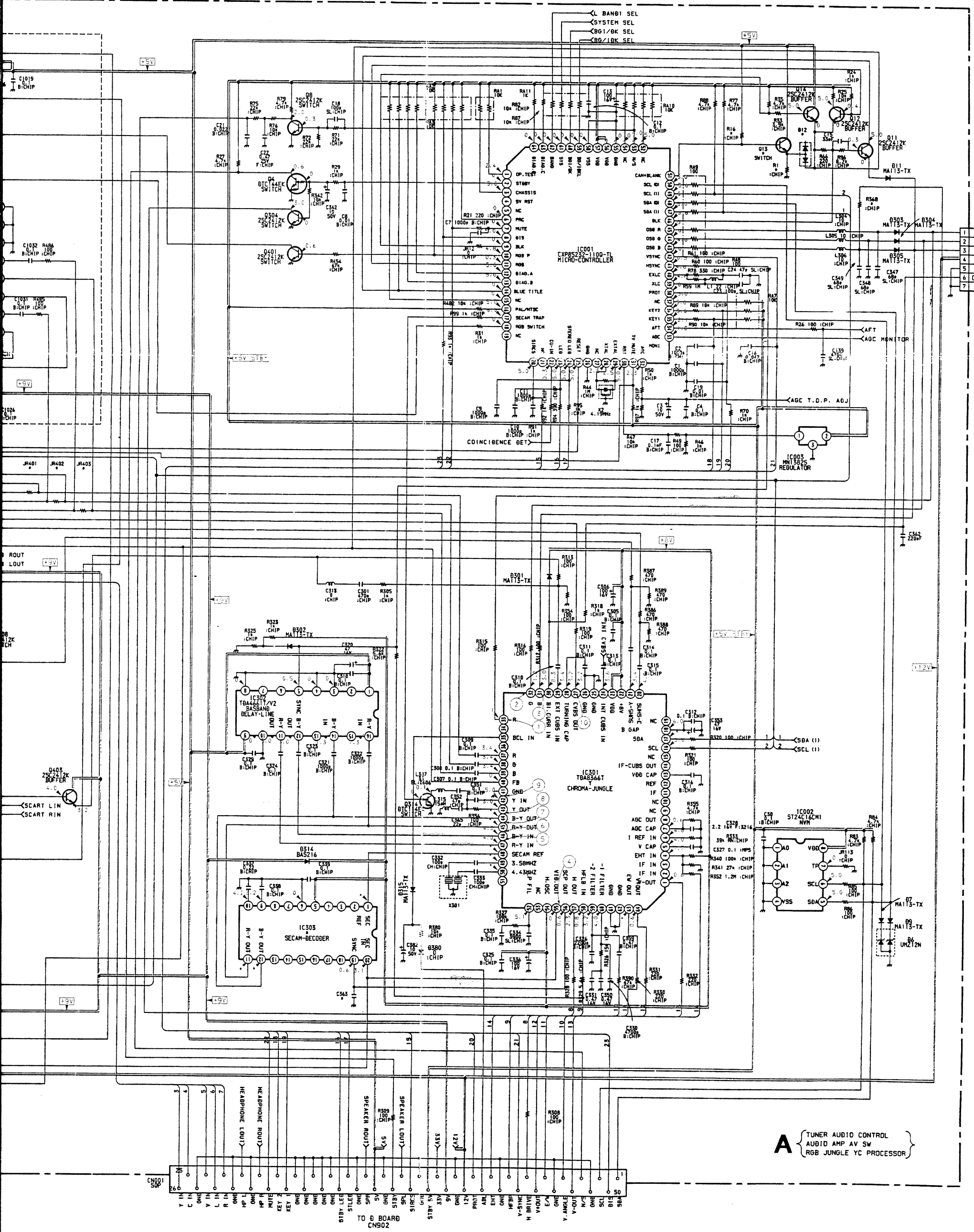


Voltages indicated with the mark ※ on the schematic diagram are shown in the table below.

A BOARD

IC	Pin	PAL	SECAM	NTSC 3.58	NTSC 4.43
IC301	17	4.0	4.0	4.0	0
	35	3.6	2.5	3.5	3.5
	44	1.5	3.1	1.5	1.5
	45	1.5	3.0	1.5	1.5
	48	1.7	4.4	1.6	1.7
	49	1.4	1.4	2.0	1.4
	50	2.0	2.0	1.4	2.0
	63	3.4	2.5	2.2	2.5
IC303	1	1.7	4.4	1.6	1.7
	11	1.5	3.0	1.5	1.5
	12	1.5	3.1	1.5	1.5

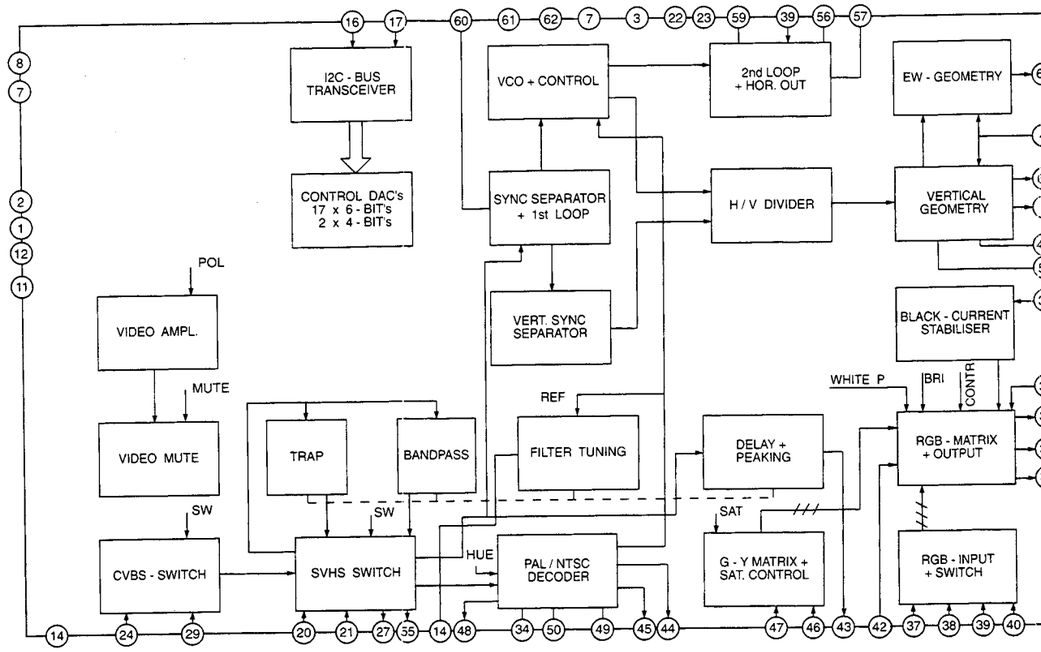

L BAND1 SEL
SYSTEM SEL
BG1/BK SEL
BG/I.BK SEL
+5V
+9V
IC1002
CF70205AFN-R
TELETEXT
DECODER
IC1003
HD14053BP RGB SWITCH
IC1001
CXP85232-1100-TL
MICRO-CONTROLLER
IC401
CXA1855Q-T6
A/V
SWITCH
IC302
TDA4661T/V2
BASBAND
DELAY-LINE
IC301
TDA8366T
Y
CHROMA-JUNGLE
IC303
SECAM-DECODER
X1
4.19MHz
X301
4.43MHz
SCART1 ROUT
SCART1 LOUT
SCART LIN
SCART RIN
COINCIDENCE DET
TO VM BOARD
CN1819
29" ONLY
TO B BOARD
CN902


L BAND1 SEL
SYSTEM SEL
BG1/DK SEL
BG/I/DK SEL
+5V
+9V
+8V
+12V
IC001
CXP85232-1100-TL
MICRO-CONTROLLER
IC301
TBA8566T
Y
CHROMA-JUNGLE
IC302
TDA4661T/V2
BASBAND
DELAY-LINE
IC303
SECAM-DECODER
IC002
ST24C16CM1
NVM
IC003
MN1382S
REGULATOR
Q08 2SC2412K SWITCH
Q04 DTC144EK SWITCH
Q304 2SC2412K SWITCH
Q401 2SC2412K SWITCH
Q403 2SC2412K BUFFER
Q314 DTC144E SWITCH
Q13 SWITCH
Q14 2SC2412K BUFFER
Q12 2SC2412K BUFFER
Q11 2SC2412K BUFFER
D11 MA113-TX
D303 MA113-TX
D304 MA113-TX
D305 MA113-TX
D301 MA113-TX
D302 MA113-TX
D315 MA113-TX
D7 MA113-TX
D9 MA113-TX
D6 UMZ12N
CN002 7P WHT
1 R
2 G
3 B
4 +12V
5 GND
6 CUT OFF
7 GND
TO C BOARE CN703
AFT
AGC MONITOR
AGC T.D.P. ADJ
COINCIBENCE DET
SCART LIN
SCART RIN
ROUT
LOUT
CN001 50P
TO B BOARD CN902
HEADPHONE LOUT
HEADPHONE ROUT
SPEAKER ROUT
SPEAKER LOUT
A
TUNER AUDIO CONTROL
AUDIO AMP AV SW
RGB JUNGLE YC PROCESSOR

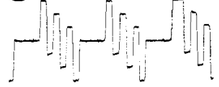
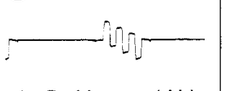
A BOARD * MARK

Model	C2981A	C2980B	C2981D	C2983E
C101	22MF	4.7MF	22MF	22MF
C118	0.1MF	0.22MF	0.22MF	0.1MF
C143	-	1MF	-	-
C144	-	100MF	-	-
C154	180PF	33PF	180PF	180PF
C157	-	68PF	-	-
C162	-	0.012MF	-	-
C163	-	0.001MF	-	-
C363	-	22PF	22PF	-
CF104	_	6.0 MHz	6.5MHz	-
D12	_	MA715-TX	-	-
D102	_	DAN202K	-	-
D103	_	DAN202K	DAN202K	-
IC303	-	TDA8395T	TDA8395T	-
JR122	0	-	0	0
JR123	0	-	0	0
JR125	0	-	-	0
JR201	0	-	0	-
JR202	0	-	0	-
JR401	-	0	-	-
JR402	-	0	-	-
JR403	-	0	-	-
L104	-	100UH	-	-
L105	15UH	5.5UH	15UH	15UH
L108	8.2UH	27UH	8.2UH	8.2UH
Q13	-	2SC2412K	-	-
Q103	-	DTC114EK	-	-
Q104	-	DTC114EK	-	-
Q105	-	DTC114EK	-	-
Q116	-	DTC114EK	DTC114EK	-
Q117	-	DTC114EK	DTC114EK	-
Q121	-	2SA1162-G	-	-
Q125	-	DTC114EK	-	-
R1	-	1K	-	-
R16	-	1K	-	-
R134	-	2.2K	2.2K	-
R135	-	2.2K	2.2K	-
R143	-	2.2K	2.2K	-
R147	220	180	220	220
R150	-	0	-	-
R193	-	1K	-	-
R199	390	1.2K	390	390
R368	6.8K	-	6.8K	6.8K
RV102	-	22K	-	-
SWF102	1-760-329-11	1-760-244-21	1-760-329-11	1-760-329-11

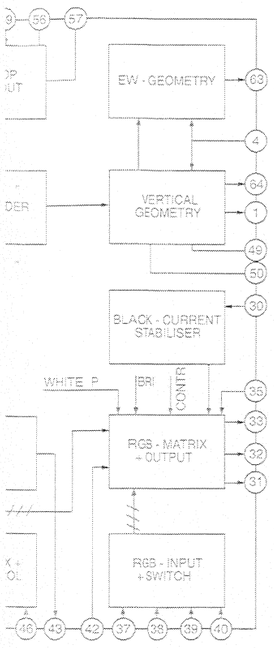
A BOARD IC301 TDA8366T

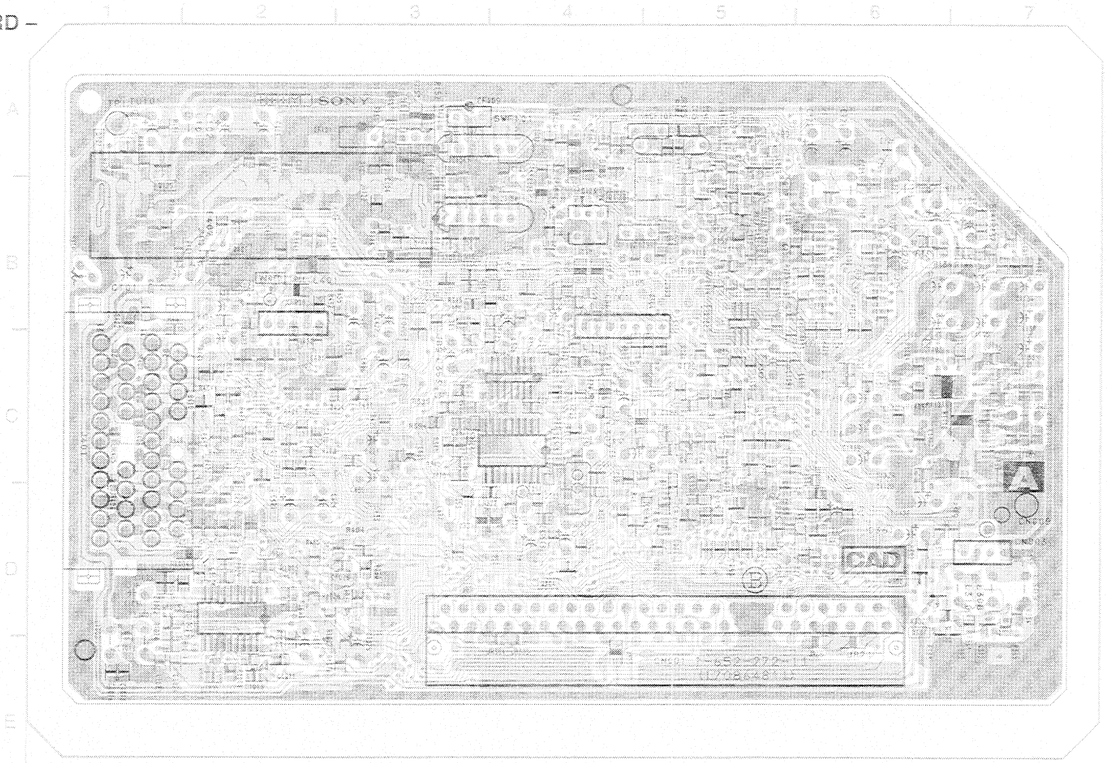


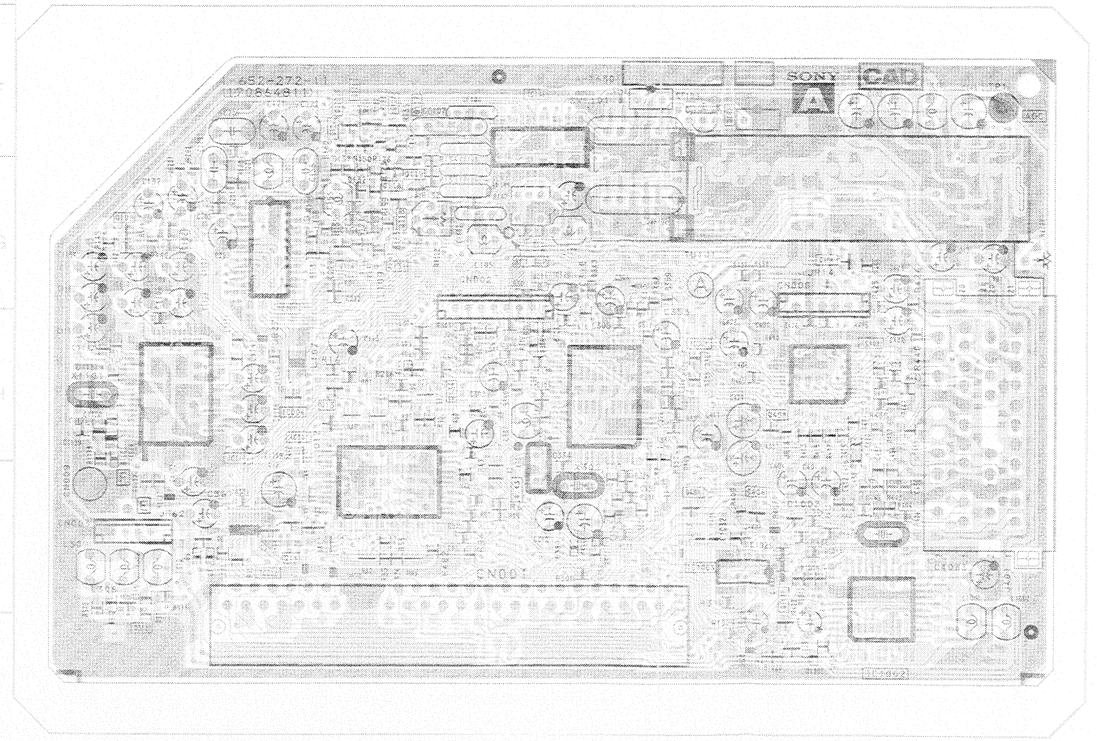
WAVEFORMS A BOARD

① 3.5 Vp-p (H)	② 3.0 Vp-p (H)	③ PAL.SECAM 2.5 Vp-p (H)	③ NTSC 2.3 Vp-p (H)	④ PAL 0.1 Vp
④ SECAM 1.1 Vp-p (H)	④ NTSC 0.9 Vp-p (H)	⑤ 1.0 Vp-p (H)	⑥  1.4 Vp-p (H)	⑦ PAL 1.4 Vp
⑦ SECAM 1.1 Vp-p (H)	⑧ PAL 0.8 Vp-p (H)	⑧ SECAM  1.5 Vp-p (H)	⑧ NTSC 0.9 Vp-p (H)	⑨ PAL 0.5 Vp
⑨ NTSC 0.4 Vp-p (H)	⑩ 1.0 Vp-p (H)			

– A BOARD –





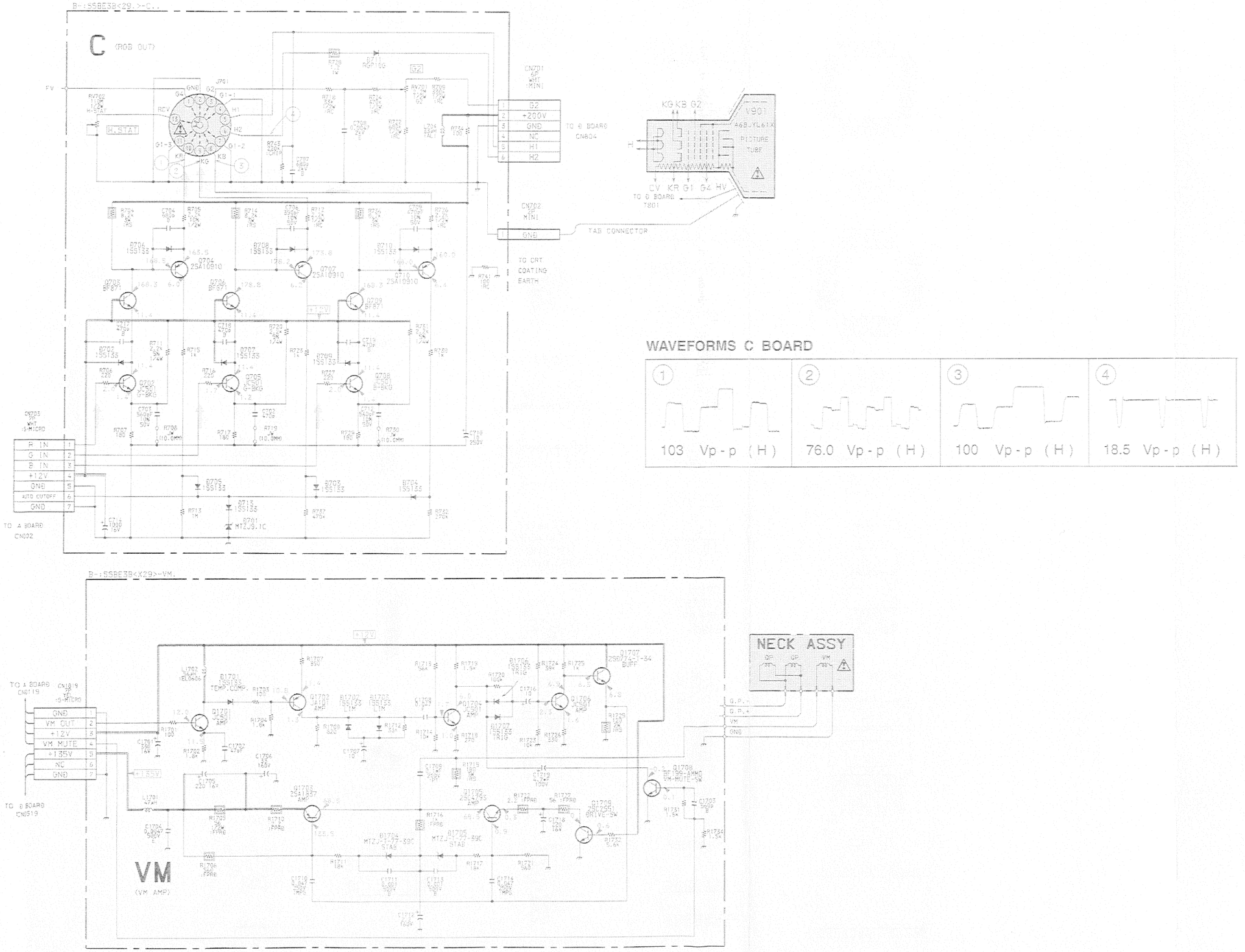


SC	④ PAL
Vp-p (H)	0.1 Vp-p (H)
	⑦ PAL.NTSC
Vp-p (H)	1.4 Vp-p (H)
SC	⑨ PAL.SECAM
Vp-p (H)	0.5 Vp-p (H)

IC		Q313	J - 1
IC001	H - 2	Q314	C - 4
IC002	I - 2	Q380	D - 6
IC101	F - 4	Q381	D - 6
IC201	G - 2	Q401	I - 5
IC202	B - 5	Q402	B - 2
IC301	H - 5	Q403	B - 3
IC302	C - 4	Q404	G - 6
IC303	C - 4	Q1001	I - 6
IC401	H - 6	Q1003	J - 5
IC1001	D - 2	**DIODE**	
IC1002	J - 6	D6	I - 2
IC1003	I - 5	D7	I - 2
IC1101	H - 2	D9	I - 2
TRANSISTOR		D11	D - 5
Q4	D - 6	D101	B - 2
Q8	C - 5	D102	B - 4
Q11	D - 5	D103	A - 5
Q12	C - 5	D201	B - 6
Q14	I - 2	D301	G - 4
Q102	F - 5, A - 3	D302	C - 4
Q103	B - 3	D303	H - 3
Q104	B - 3	D304	B - 5
Q105	B - 3	D305	C - 4
Q107	B - 5	D314	B - 3
Q108	G - 2	D380	I - 4
Q109	G - 1	D401	C - 2
Q114	G - 3	D402	C - 2
Q116	G - 3	D404	C - 2
Q117	F - 3	D405	C - 2
Q120	C - 5	D406	C - 2
Q121	A - 1	D407	C - 2
Q123	B - 4	D408	C - 2
Q124	F - 3	D409	C - 2
Q125	B - 1	D410	C - 2
Q130	B - 3	D411	D - 2
Q131	G - 3	D1002	I - 6
Q132	G - 3	D1003	J - 6
Q133	B - 4	D1101	H - 1
Q304	D - 4	D1102	C - 7
Q312	E - 7		

Note :
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

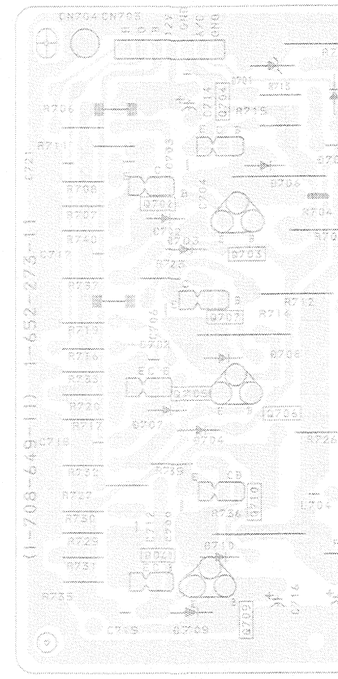
C [RGB OUT] VM



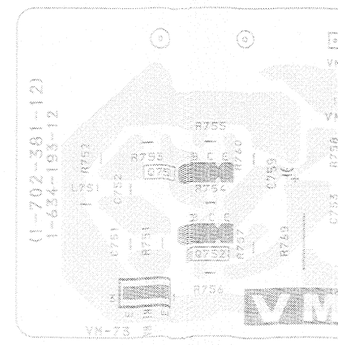
WAVEFORMS C BOARD

①	②	③	④
103 Vp-p (H)	76.0 Vp-p (H)	100 Vp-p (H)	18.5 Vp-p (H)

– C BOARD –

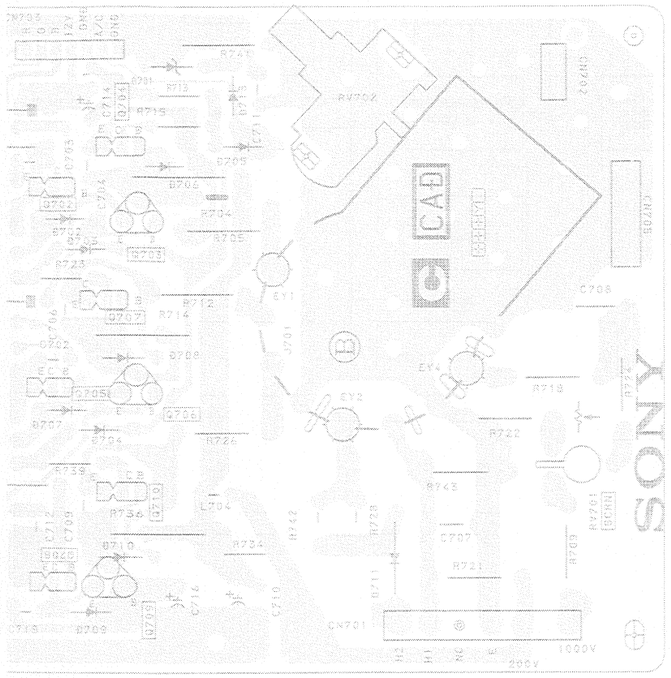


– VM BOARD –

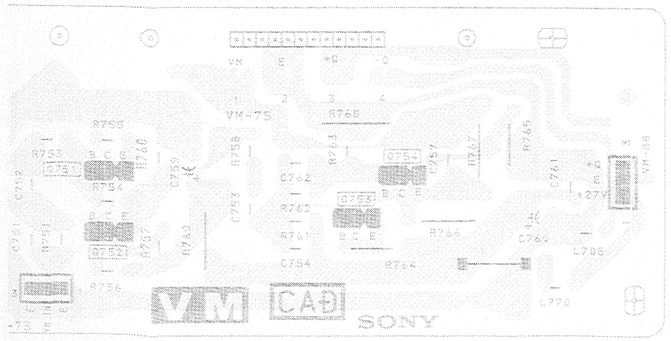


RGB OUT] VM [VM AMP]

RD –



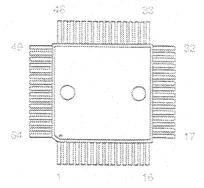
ARD –



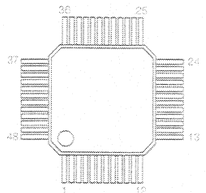
KV-C298

5.4 SEMICONDUCTORS

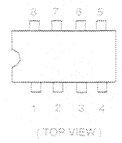
TDA8366
CF70200FN



CXA1855Q
SAA7283
CXP85232

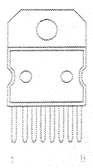


LM393
TDA7264

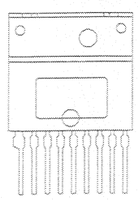


(TOP VIEW)

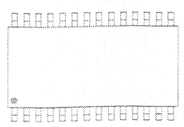
TDA7264



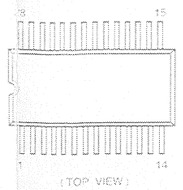
STRS6708



TDA6622

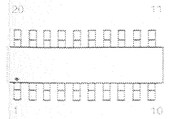


TDA9814

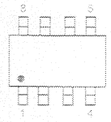


(TOP VIEW)

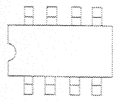
CF72306DW



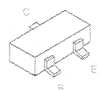
CAT24C16J



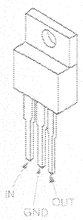
BA7046
TDA2822



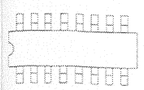
DTC144EK
DTA144EK
2SC2412K
2SA1037-G



MC7812
MC7805CT
LM2940T
SE135N



MC14053BF



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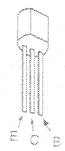
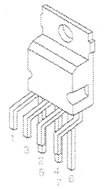
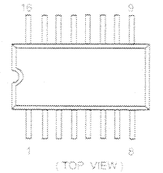
2SC2551-0
JA101
JC501TP



STV9379

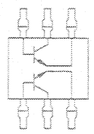


TDA4661/V2

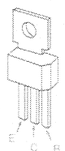


(TOP VIEW)

1MX1T110



BF871



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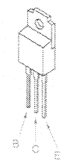
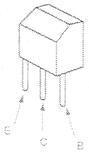
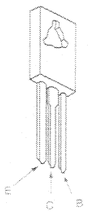
2SC4793



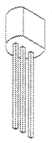
2SD774-34



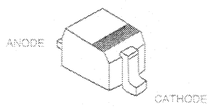
2SC2688-LK



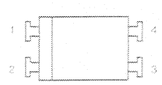
TL750L05CLP



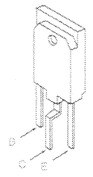
DTZ3.6A



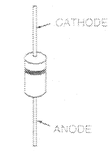
TLP621GR



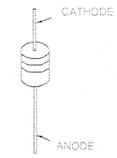
2SC4927-01



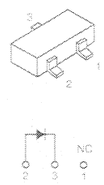
RGP10GPKG23
RGP15GPKG23
GP08DPKG23
RU-4AM
EL1Z
EU-1-V1
EU-1ZV1



MTZJ-9.1C
MTZJ-5.1B
MTZJ-9.1
MTZJ-3.6A
MTZJ-6.8C
MTZJ-39C
1SS133



MA704WK



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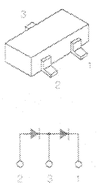

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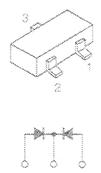
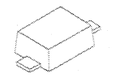
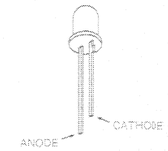


MA8039
MA113



SLR-54VR3



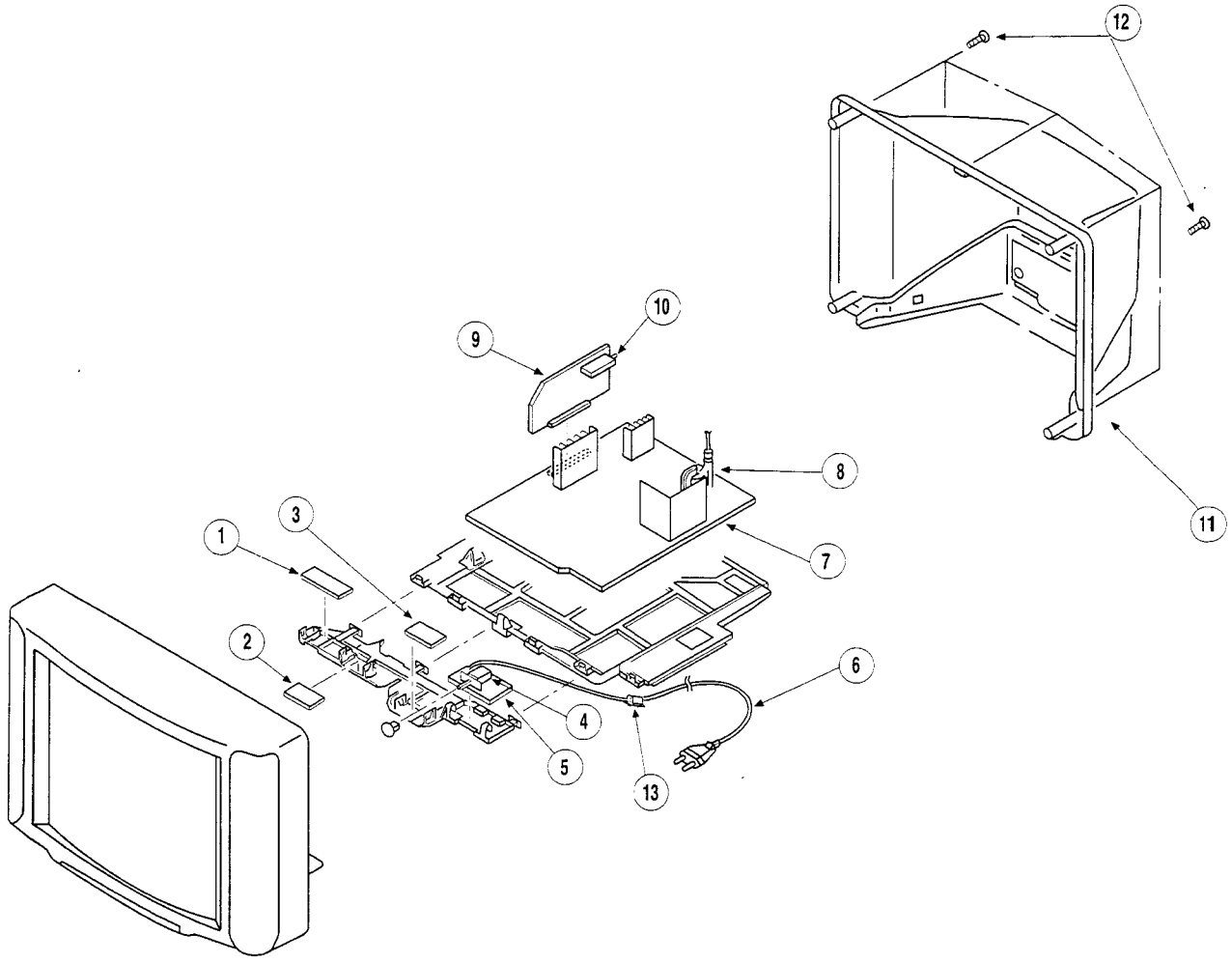
SECTION 6
EXPLODED VIEWS

NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

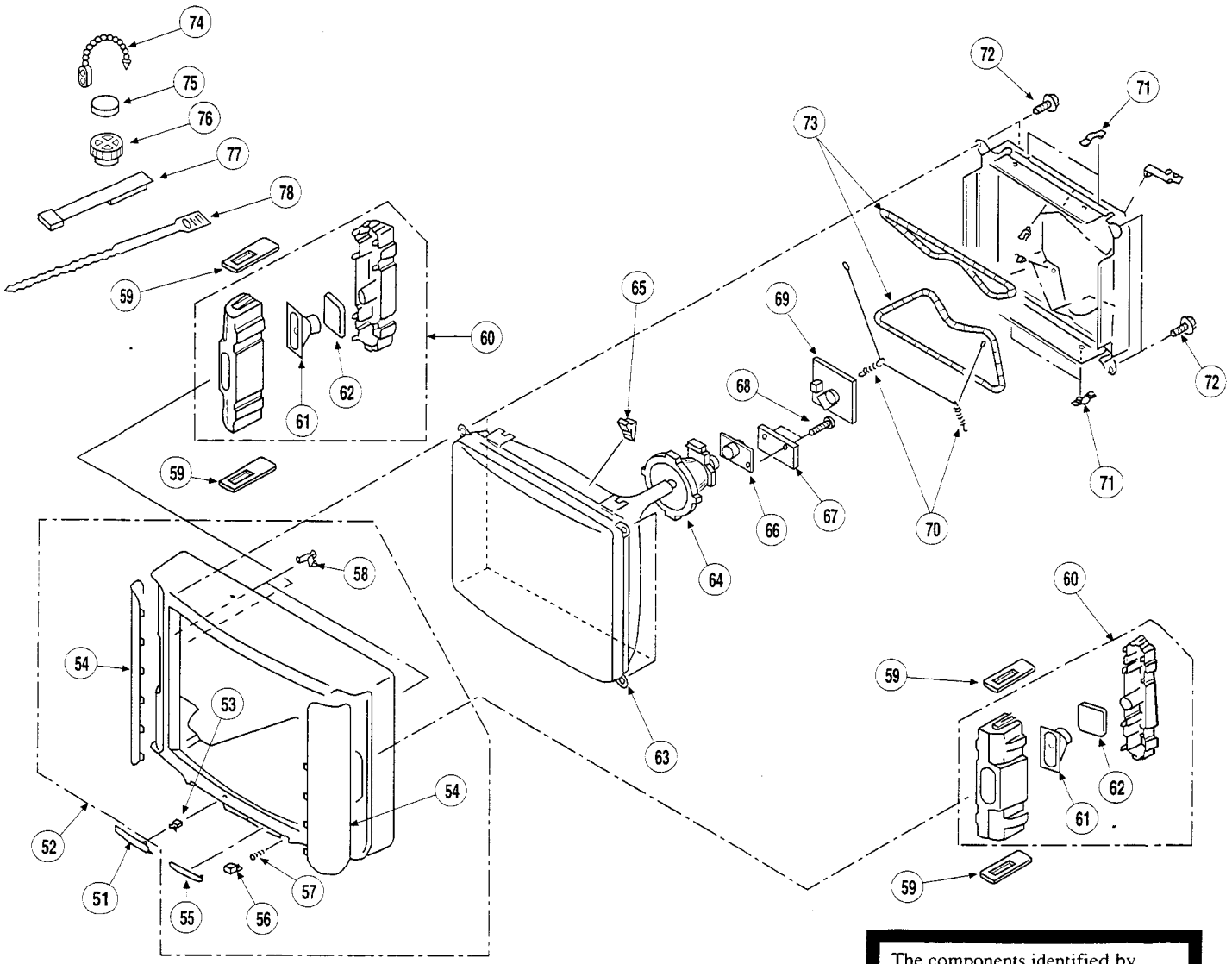
The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

6-1. CHASSIS



REF NO		PART NO	DESCRIPTION	REMARK
1		*1-652-275-11	H1 BOARD	
2		*1-652-270-11	H3 BOARD	
3		*1-652-269-11	H2 BOARD	
4	⚠	1-571-433-11	SWITCH, PUSH (AC POWER)	
5		*1-652-271-12	F1 BOARD	
6	⚠	1-751-680-11	CORD, POWER (WITH NOISE FILTER) (KV-C2981A/C2981D)	
	⚠	1-590-460-11	CORD, POWER (WITH CONNECTOR) (KV-C2980B/C2983E)	
7		*A-1642-125-A	D BOARD, COMPLETE	
8	⚠	1-453-169-11	TRANSFORMER ASSY, FLYBACK (UX-1604A2)	
9		*A-1632-224-A	A BOARD, COMPLETE (KV-C2981A)	
		*A-1632-213-A	A BOARD, COMPLETE (KV-C2980B)	
		*A-1632-216-A	A BOARD, COMPLETE (KV-C2981D)	
		*A-1632-232-A	A BOARD, COMPLETE (KV-C2983E)	
10		8-598-045-01	TUNER (BTP-EC411)	
11		4-202-769-01	COVER, REAR	
12		4-039-358-01	SCREW +BVTP 4X16	
13	⚠	4-389-201-11	HOLDER, AC CORD	

6-2. PICTURE TUBE



The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

REF NO		PART NO	DESCRIPTION	REMARK
51		4-200-990-51	DOOR	
52		X-4200-167-1	BEZNET ASSY	54-58
53		4-392-036-01	CATCHER, PUSH	
54		X-4200-099-1	PLATE ASSY, ORNAMENTAL	
55		4-202-774-01	WINDOW, ORNAMENTAL	
56		4-200-991-11	BUTTON, POWER	
57		4-392-112-41	SPRING	
58		4-200-992-01	CLIP, CONTACT	
59		4-202-307-02	CUSHION, BOX	
60		A-1678-048-A	BOX ASSY	
61		1-504-146-11	SPEAKER (5X11CM)	
62		4-200-999-01	STOPPER	
63	⚠	8-733-831-05	PICTURE TUBE SD-191 (A68JYL61X)	
64	⚠	8-451-313-61	DEFLECTION YOKE (Y29FXA)	
65		3-704-495-01	SPACER, DY	
66	⚠	1-452-509-41	NECK ASSY, CRT (NA-308)	
67		*A-1644-052-A	VM BOARD, COMPLETE	
68		4-039-357-01	SCREW (3X8), (+) BV TAPPING	
69		*A-1638-053-A	C BOARD, COMPLETE	
70		4-369-318-51	SPRING, TENSION	
71		4-034-296-01	HOLDER, DGC	
72		4-036-188-01	SCREW (M), PT	
73	⚠	1-402-747-21	COIL, DEGAUSSING	
74		4-308-870-00	CLIP, LEAD WIRE	
75		1-452-032-00	MAGNET, DISK; 10MMØ	
76		1-452-094-00	MAGNET, ROTATABLE DISK; 15MMØ	
77		X-4387-214-1	PERMALLOY ASSY, CORRECTION	
78		3-701-007-00	BAND BINDING	

ELECTRICAL PARTS LIST

SECTION 7

The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS MF : mF, PF : mmF

COILS MMH : mH, μH : mH

F1 A

REF.NO.	PART NO.	DESCRIPTION	REMARK
	*1-652-271-11	F1 BOARD	
		********	
		< CONNECTOR >	
CN603 ⚠	*1-580-844-11	PIN, CONNECTOR (POWER)	
CN604 ⚠	*1-695-292-11	PIN, CONNECTOR (POWER)	
		< FUSE >	
F601 ⚠	1-576-232-21	FUSE (H.B.C.) 5A/250V	
⚠	1-533-230-11	HOLDER, FUSE (F601)	
	4-201-057-01	COVER, FUSE (F601)	
		< SWITCH >	
S601 ⚠	1-571-433-11	SWITCH, PUSH (AC POWER)	
**********			
	*A-1632-224-A	A BOARD, COMPLETE (KV-C2981A)	
		**********	
	*A-1632-213-A	A BOARD, COMPLETE (KV-C2980B)	
		**********	
	*A-1632-216-A	A BOARD, COMPLETE (KV-C2981D)	
		**********	
	*A-1632-232-A	A BOARD, COMPLETE (KV-C2983E)	
		**********	
TP1	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	
		< CAPACITOR >	
C1	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C2	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C3	1-124-907-11	ELECT 10MF 20%	50V
C4	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C7	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C8	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C9	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C10	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C11	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C12	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C13	1-126-101-11	ELECT 100MF 20%	16V
C15	1-163-105-00	CERAMIC CHIP 33PF 5%	50V
C16	1-163-809-11	CERAMIC CHIP 0.047MF 10%	25V
C17	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C18	1-163-117-00	CERAMIC CHIP 100PF 5%	50V
C19	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C21	1-163-037-11	CERAMIC CHIP 0.022MF 10%	25V
C22	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C23	1-163-117-00	CERAMIC CHIP 100PF 5%	50V
C24	1-163-109-00	CERAMIC CHIP 47PF 5%	50V
C30	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C101	1-124-916-11	ELECT 22MF 20%	50V
		(KV-C2981A/C2981D/C2983E)	
	1-124-927-11	ELECT 4.7MF 20%	50V
		(KV-C2980B)	
C102	1-124-917-11	ELECT 33MF 20%	50V
C103	1-124-917-11	ELECT 33MF 20%	50V
C104	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C105	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C106	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C107	1-164-346-11	CERAMIC CHIP 1MF	16V
C108	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C109	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C112	1-163-117-00	CERAMIC CHIP 100PF 5%	50V
C113	1-124-477-11	ELECT 47MF 20%	16V
C114	1-164-346-11	CERAMIC CHIP 1MF	16V
C115	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V
C117	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C118	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
		(KV-C2981A/C2983E)	
	1-164-489-11	CERAMIC CHIP 0.22MF 10%	16V
		(KV-C2980B/C2981D)	
C119	1-163-133-00	CERAMIC CHIP 470PF 5%	50V
C120	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C121	1-124-477-11	ELECT 47MF 20%	16V
C122	1-124-477-11	ELECT 47MF 20%	16V
C123	1-163-090-00	CERAMIC CHIP 7PF 0.25PF	50V
C124	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C125	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C126	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C127	1-124-917-11	ELECT 33MF 20%	50V
C128	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C129	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C130	1-216-295-91	METAL GLAZE 0 5% 1/10W	
C131	1-124-477-11	ELECT 47MF 20%	16V
C132	1-124-477-11	ELECT 47MF 20%	16V
C134	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C135	1-124-477-11	ELECT 47MF 20%	16V
C137	1-163-133-00	CERAMIC CHIP 470PF 5%	50V
C139	1-163-017-00	CERAMIC CHIP 0.0047MF 10%	50V
C142	1-163-133-00	CERAMIC CHIP 470PF 5%	50V
C143	1-126-101-11	ELECT 100MF 20%	16V
		(KV-C2980B)	

A

REF.NO.	PART NO.	DESCRIPTION	REMARK
C144	1-162-638-11	CERAMIC CHIP 1MF 16V	
			(KV-C2980B)
C145	1-163-093-00	CERAMIC CHIP 10PF 5% 50V	
C146	1-163-093-00	CERAMIC CHIP 10PF 5% 50V	
C149	1-216-295-91	METAL GLAZE 0 5% 1/10W	
C152	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C153	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C154	1-163-123-00	CERAMIC CHIP 180PF 5% 50V	
			(KV-C2981A/C2981D/C2983E)
	1-163-105-00	CERAMIC CHIP 33PF 5% 50V	
			(KV-C2980B)
C157	1-163-113-00	CERAMIC CHIP 68PF 5% 50V	
			(KV-C2980B)
C160	1-163-125-00	CERAMIC CHIP 220PF 5% 50V	
C162	1-163-022-00	CERAMIC CHIP 0.012MF 10% 50V	
			(KV-C2980B)
C163	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
			(KV-C2980B)
C164	1-163-119-00	CERAMIC CHIP 120PF 5% 50V	
C165	1-126-101-11	ELECT 100MF 20% 16V	
C201	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C202	1-163-137-00	CERAMIC CHIP 680PF 5% 50V	
C203	1-124-907-11	ELECT 10MF 20% 50V	
C204	1-164-182-11	CERAMIC CHIP 0.0033MF 10% 50V	
C205	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C206	1-164-346-11	CERAMIC CHIP 1MF 16V	
C207	1-137-613-11	FILM 0.0018MF 2% 100V	
C208	1-164-346-11	CERAMIC CHIP 1MF 16V	
C209	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C210	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C211	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C212	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C215	1-163-023-00	CERAMIC CHIP 0.015MF 10% 50V	
C216	1-163-011-11	CERAMIC CHIP 0.0015MF 10% 50V	
C219	1-163-023-00	CERAMIC CHIP 0.015MF 10% 50V	
C220	1-163-011-11	CERAMIC CHIP 0.0015MF 10% 50V	
C221	1-163-037-11	CERAMIC CHIP 0.022MF 10% 25V	
C222	1-163-037-11	CERAMIC CHIP 0.022MF 10% 25V	
C225	1-130-489-00	FILM 0.033MF 5% 50V	
C226	1-130-489-00	FILM 0.033MF 5% 50V	
C227	1-163-020-00	CERAMIC CHIP 0.0082MF 10% 50V	
C228	1-163-020-00	CERAMIC CHIP 0.0082MF 10% 50V	
C229	1-164-346-11	CERAMIC CHIP 1MF 16V	
C301	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C305	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C306	1-126-101-11	ELECT 100MF 20% 16V	
C307	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C308	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C309	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C310	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C311	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C312	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C313	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C314	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C315	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C316	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C318	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C320	1-124-477-11	ELECT 47MF 20% 16V	
C321	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C322	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C323	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C324	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C325	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C326	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C327	1-136-165-00	FILM 0.1MF 5% 50V	
C328	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C329	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C330	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C331	1-165-320-11	CERAMIC CHIP 0.47MF 10% 16V	
C332	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C333	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C334	1-163-016-00	CERAMIC CHIP 0.0039MF 10% 50V	
C335	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C336	1-126-101-11	ELECT 100MF 20% 16V	
C337	1-164-489-11	CERAMIC CHIP 0.22MF 10% 16V	
C338	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C339	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C342	1-124-907-11	ELECT 10MF 20% 50V	
C346	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C347	1-163-113-00	CERAMIC CHIP 68PF 5% 50V	
C348	1-163-113-00	CERAMIC CHIP 68PF 5% 50V	
C349	1-163-113-00	CERAMIC CHIP 68PF 5% 50V	
C350	1-165-320-11	CERAMIC CHIP 0.47MF 10% 16V	
C351	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C352	1-163-109-00	CERAMIC CHIP 47PF 5% 50V	
C353	1-124-477-11	ELECT 47MF 20% 16V	
C355	1-163-113-00	CERAMIC CHIP 68PF 5% 50V	
C359	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C361	1-124-907-11	ELECT 10MF 20% 50V	
C362	1-163-125-00	CERAMIC CHIP 220PF 5% 50V	
C363	1-163-101-00	CERAMIC CHIP 22PF 5% 50V	
			(KV-C2980B/C2981D)
C365	1-163-101-00	CERAMIC CHIP 22PF 5% 50V	
C382	1-124-907-11	ELECT 10MF 20% 50V	
C383	1-163-101-00	CERAMIC CHIP 22PF 5% 50V	
C401	1-124-477-11	ELECT 47MF 20% 16V	
C402	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C403	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C404	1-124-477-11	ELECT 47MF 20% 16V	
C406	1-124-907-11	ELECT 10MF 20% 50V	
C407	1-164-346-11	CERAMIC CHIP 1MF 16V	
C409	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C410	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C411	1-124-477-11	ELECT 47MF 20% 16V	
C418	1-163-121-00	CERAMIC CHIP 150PF 5% 50V	
C420	1-216-295-91	METAL GLAZE 0 5% 1/10W	
C421	1-124-917-11	ELECT 33MF 20% 50V	
C422	1-163-121-00	CERAMIC CHIP 150PF 5% 50V	
C423	1-124-477-11	ELECT 47MF 20% 16V	
C425	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C426	1-164-346-11	CERAMIC CHIP 1MF 16V	
C427	1-124-477-11	ELECT 47MF 20% 16V	
C428	1-164-346-11	CERAMIC CHIP 1MF 16V	
C429	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C430	1-124-477-11	ELECT 47MF 20% 16V	
C431	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C432	1-124-477-11	ELECT 47MF 20% 16V	
C433	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C434	1-164-346-11	CERAMIC CHIP 1MF 16V	
C435	1-126-101-11	ELECT 100MF 20% 16V	
C436	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C437	1-164-346-11	CERAMIC CHIP 1MF 16V	

REF.NO.	PART NO.	DESCRIPTION		REMARK
C438	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C445	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
	< C1002 - C1034 FITTED ON >			
	< KV-C2981A/C2981D/C2983E >			
C1002	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1003	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C1004	1-163-097-00	CERAMIC CHIP 15PF	5%	50V
C1005	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C1007	1-163-125-00	CERAMIC CHIP 220PF	5%	50V
C1008	1-163-125-00	CERAMIC CHIP 220PF	5%	50V
C1009	1-163-097-00	CERAMIC CHIP 15PF	5%	50V
C1011	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C1013	1-164-346-11	CERAMIC CHIP 1MF		16V
C1015	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C1016	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C1018	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1019	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1020	1-124-916-11	ELECT 22MF	20%	50V
C1021	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1024	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C1025	1-124-477-11	ELECT 47MF	20%	16V
C1026	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1027	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1028	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1029	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1030	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1031	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1032	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1033	1-124-907-11	ELECT 10MF	20%	50V
C1034	1-164-346-11	CERAMIC CHIP 1MF		16V
	< C1101 - C1139 FITTED ON >			
	< KV-C2980B/C2983E >			
C1101	1-163-131-00	CERAMIC CHIP 390PF	5%	50V
C1102	1-163-093-00	CERAMIC CHIP 10PF	5%	50V
C1103	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1104	1-124-907-11	ELECT 10MF	20%	50V
C1105	1-124-907-11	ELECT 10MF	20%	50V
C1106	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1107	1-124-477-11	ELECT 47MF	20%	16V
C1108	1-124-907-11	ELECT 10MF	20%	50V
C1110	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V
C1111	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V
C1112	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V
C1113	1-163-137-00	CERAMIC CHIP 680PF	5%	50V
C1116	1-124-477-11	ELECT 47MF	20%	16V
C1117	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1118	1-124-477-11	ELECT 47MF	20%	16V
C1119	1-124-477-11	ELECT 47MF	20%	16V
C1120	1-163-137-00	CERAMIC CHIP 680PF	5%	50V
C1122	1-124-477-11	ELECT 47MF	20%	16V
C1123	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1124	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1125	1-165-320-11	CERAMIC CHIP 0.47MF	10%	16V
C1126	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C1127	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C1128	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V
C1129	1-162-568-11	CERAMIC CHIP 0.33MF		25V
C1130	1-124-903-11	ELECT 1MF	20%	50V
C1131	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1132	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1133	1-124-477-11	ELECT 47MF	20%	16V
C1134	1-124-907-11	ELECT 10MF	20%	50V
C1135	1-163-125-00	CERAMIC CHIP 220PF	5%	50V
C1136	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1137	1-163-095-00	CERAMIC CHIP 12PF	5%	50V
C1139	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
	< FILTER >			
CF101	1-760-154-21	TRAP, CERAMIC		
CF102	1-404-134-00	TRAP, CERAMIC (5.5MHZ)		
CF103	1-760-106-21	FILTER, CERAMIC		
CF104	1-567-100-00	FILTER, CERAMIC (KV-C2980B/C2981D)		
CF106	1-760-107-21	FILTER, CERAMIC		
SWF101	1-579-273-11	FILTER, SURFACE WAVE		
SWF102	1-760-329-11	FILTER, SURFACE WAVE (KV-C2981A/C2981D/C2983E)		
	1-760-244-21	FILTER, SURFACE WAVE (KV-C2980B)		
	< CONNECTOR >			
CN001	1-695-302-21	CONNECTOR, BOARD TO BOARD 50P		
CN002	*1-568-882-51	PIN, CONNECTOR 7P		
	< DIODE >			
D6	8-719-047-41	DIODE UMZ12N-T146		
D7	8-719-041-97	DIODE MA113-TX		
D9	8-719-041-97	DIODE MA113-TX		
D11	8-719-041-97	DIODE MA113-TX		
D12	8-719-049-64	DIODE MA715-TX (KV-C2980B)		
D101	8-719-018-13	DIODE MA8330-TX		
D102	8-719-914-43	DIODE DAN202K (KV-C2980B)		
D103	8-719-914-43	DIODE DAN202K (KV-C2980B/C2981D)		
D201	8-719-914-42	DIODE DA204K		
D301	8-719-041-97	DIODE MA113-TX		
D302	8-719-041-97	DIODE MA113-TX		
D303	8-719-041-97	DIODE MA113-TX		
D304	8-719-041-97	DIODE MA113-TX		
D305	8-719-041-97	DIODE MA113-TX		
D314	8-719-047-16	DIODE BAS216		
D315	8-719-041-97	DIODE MA113-TX		
D380	1-216-295-91	METAL GLAZE 0	5%	1/10W
D401	8-719-047-41	DIODE UMZ12N-T146		
D402	8-719-047-41	DIODE UMZ12N-T146		
D404	8-719-047-41	DIODE UMZ12N-T146		
D405	8-719-047-41	DIODE UMZ12N-T146		
D406	8-719-047-41	DIODE UMZ12N-T146		
D407	8-719-047-41	DIODE UMZ12N-T146		
D408	8-719-047-41	DIODE UMZ12N-T146		
D409	8-719-047-41	DIODE UMZ12N-T146		
D410	8-719-047-41	DIODE UMZ12N-T146		
D411	8-719-047-41	DIODE UMZ12N-T146		
D1002	8-719-914-43	DIODE DAN202K (KV-C2981A/C2981D/C2983E)		
D1101	8-719-041-97	DIODE MA113-TX (KV-C2980B/C2983E)		
D1102	8-719-820-71	DIODE 1SV214 (KV-C2980B/C2983E)		

A

REF.NO.	PART NO.	DESCRIPTION	REMARK
		< IC >	
IC001	8-752-854-74	IC CXP85232-110Q-TL	
IC002	8-759-277-89	IC ST24C16CM1-TR/A	
IC003	8-759-041-54	IC MN1382S	
IC004	8-759-041-54	IC MN1382S	
IC101	8-759-193-14	IC TDA9814T	
IC201	8-759-252-14	IC TDA6612-5X-GEG	
IC202	8-759-514-57	IC BA7046F	
IC301	8-759-251-57	IC TDA8366T	
IC302	8-759-086-97	IC TDA4661T/V2	
IC303	8-759-251-56	IC TDA8395T (KV-C2980B/C2981D)	
IC401	8-752-069-53	IC CXA1855Q-T6	
IC1001	8-759-252-08	IC CF72306DW-R (KV-C2981A/C2981D/C2983E)	
IC1002	8-759-275-29	IC CF70205AFN-R (KV-C2981A/C2981D/C2983E)	
IC1003	8-759-300-71	IC HD14053BFP (KV-C2981A/C2981D/C2983E)	
IC1004	8-759-991-19	IC PST529CMT-T1 (KV-C2981A/C2981D/C2983E)	
IC1101	8-759-251-58	IC SAA7283T (KV-C2980B/C2983E)	
		< SOCKET >	
J401	1-766-296-11	CONNECTOR, DUAL SCART	
		< COIL >	
JR25	1-412-006-31	INDUCTOR CHIP 10UH	
JR26	1-412-006-31	INDUCTOR CHIP 10UH	
JR29	1-412-006-31	INDUCTOR CHIP 10UH	
L1	1-412-010-41	INDUCTOR CHIP 22UH	
L100	1-410-989-11	INDUCTOR CHIP 0.47UH	
L101	1-408-609-41	INDUCTOR 33UH	
L102	1-410-214-31	INDUCTOR CHIP 68UH	
L103	1-408-419-00	INDUCTOR 68UH	
L104	1-414-170-11	INDUCTOR CHIP 100UH (KV-C2980B)	
L105	1-408-411-00	INDUCTOR 15UH (KV-C2981A/C2981D/C2983E)	
	1-408-406-00	INDUCTOR 5.6UH (KV-C2980B)	
L106	1-412-011-31	INDUCTOR CHIP 27UH	
L107	1-410-985-11	INDUCTOR CHIP 0.22UH	
L108	1-408-408-00	INDUCTOR 8.2UH (KV-C2981A/C2981D/C2983E)	
	1-408-414-00	INDUCTOR 27UH (KV-C2980B)	
L109	1-412-010-41	INDUCTOR CHIP 22UH	
L110	1-412-004-31	INDUCTOR CHIP 6.8UH	
L111	1-414-170-11	INDUCTOR CHIP 100UH	
L112	1-410-200-31	INDUCTOR CHIP 4.7UH	
L201	1-410-067-21	INDUCTOR 4.7MMH	
L307	1-408-609-41	INDUCTOR 33UH	
L308	1-408-424-00	INDUCTOR 180UH	
L309	1-408-424-00	INDUCTOR 180UH	
L310	1-408-407-00	INDUCTOR 6.8UH	
L313	1-216-295-91	METAL GLAZE 0 5% 1/10W	
L315	1-412-008-11	INDUCTOR CHIP 15UH	
L401	1-410-214-31	INDUCTOR CHIP 68UH	
L1001	1-408-419-00	INDUCTOR 68UH	
L1002	1-408-419-00	INDUCTOR 68UH	
L1003	1-410-999-11	INDUCTOR CHIP 3.3UH	
L1101	1-412-004-31	INDUCTOR CHIP 6.8UH	

REF.NO.	PART NO.	DESCRIPTION	REMARK
T101	1-403-686-11	COIL	
		< TRANSISTOR >	
Q4	8-729-901-01	TRANSISTOR DTC144EK	
Q8	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q11	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q12	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q13	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-C2580B)	
Q14	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q102	8-729-104-80	TRANSISTOR 2SC3355	
Q103	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B)	
Q104	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B)	
Q105	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B)	
Q107	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q108	8-729-907-26	TRANSISTOR IMX1	
Q109	8-729-907-26	TRANSISTOR IMX1	
Q114	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q116	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B/C2981D)	
Q117	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B/C2981D)	
Q120	8-729-216-22	TRANSISTOR 2SA1162-G	
Q121	8-729-216-22	TRANSISTOR 2SA1162-G (KV-C2980B)	
Q123	8-729-901-01	TRANSISTOR DTC144EK	
Q124	8-729-901-01	TRANSISTOR DTC144EK	
Q125	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B)	
Q130	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q131	8-729-216-22	TRANSISTOR 2SA1162-G	
Q132	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q133	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q134	8-729-900-53	TRANSISTOR DTC114EK	
Q304	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q312	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q313	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q314	8-729-900-53	TRANSISTOR DTC114EK	
Q380	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q381	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q401	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q402	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q403	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q404	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q406	8-729-216-22	TRANSISTOR 2SA1162-G	
Q407	8-729-900-53	TRANSISTOR DTC114EK	
Q408	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1001	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-C2981A/C2981D/C2983E)	
		< RESISTOR >	
JR3	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR8	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR9	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR10	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR12	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR13	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR14	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR15	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR16	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR17	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR18	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR19	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR22	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR24	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR28	1-216-296-91	METAL GLAZE 0 5% 1/8W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR30	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR31	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR51	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR52	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR55	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR56	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR57	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR59	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR60	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR61	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR62	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR65	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR69	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR70	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR71	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR113	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR120	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR122	1-216-295-91	METAL GLAZE	0	5%	1/10W	(KV-C2981A/C2981D/C2983E)
JR123	1-216-295-91	METAL GLAZE	0	5%	1/10W	(KV-C2981A/C2981D/C2983E)
JR124	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR125	1-216-295-91	METAL GLAZE	0	5%	1/10W	(KV-C2981A/C2981D/C2983E)
JR126	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR201	1-216-295-91	METAL GLAZE	0	5%	1/10W	(KV-C2981A/C2981D)
JR202	1-216-295-91	METAL GLAZE	0	5%	1/10W	(KV-C2981A/C2981D)
JR401	1-216-295-91	METAL GLAZE	0	5%	1/10W	(KV-C2980B)
JR402	1-216-295-91	METAL GLAZE	0	5%	1/10W	(KV-C2980B)
JR403	1-216-295-91	METAL GLAZE	0	5%	1/10W	(KV-C2980B)
JR408	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR1004	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R1	1-216-049-00	METAL GLAZE	1K	5%	1/10W	(KV-C2980B)
R6	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R16	1-216-049-00	METAL GLAZE	1K	5%	1/10W	(KV-C2980B)
R21	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R24	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R25	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R26	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R27	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R29	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R31	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R33	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R35	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R44	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R46	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R47	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R49	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R50	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R54	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R59	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R60	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R61	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R66	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R70	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R71	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R72	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R73	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	
R75	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R76	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R77	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R78	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R79	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R82	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R83	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R84	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R85	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R86	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R87	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R88	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R89	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R90	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R91	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R92	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R93	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R94	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R95	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R96	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R97	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R99	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R101	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R103	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R104	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R105	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R106	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R107	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R108	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R109	1-216-180-00	METAL GLAZE	180	5%	1/8W	
R110	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R111	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R112	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R113	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R114	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R115	1-218-755-11	METAL CHIP	130K	0.50%	1/10W	
R116	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R117	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R118	1-216-107-00	METAL GLAZE	270K	5%	1/10W	
R119	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R120	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R121	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R122	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R123	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R124	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R125	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R126	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R127	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R128	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R130	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R131	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R134	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	(KV-C2980B/C2981D)
R135	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	(KV-C2980B/C2981D)
R136	1-216-081-00	METAL GLAZE	22K	5%	1/10W	

A

REF.NO.	PART NO.	DESCRIPTION				REMARK
R137	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R139	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R140	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R141	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R142	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R143	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
			(KV-C2980B/C2981D)			
R144	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R145	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R146	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R147	1-216-033-00	METAL GLAZE	220	5%	1/10W	
			(KV-C2981A/C2981D/C2983E)			
	1-216-031-00	METAL GLAZE	180	5%	1/10W	
					(KV-C2980B)	
R148	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R149	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R150	1-216-295-91	METAL GLAZE	0	5%	1/10W	
					(KV-C2980B)	
R151	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R153	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R154	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R155	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R156	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R157	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R160	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R161	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R162	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R163	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R164	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R165	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R166	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R170	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R171	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R172	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R173	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R174	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R180	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R182	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R183	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R185	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R186	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R193	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
					(KV-C2980B)	
R194	1-216-180-00	METAL GLAZE	180	5%	1/8W	
R195	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R196	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R197	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R198	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R199	1-216-039-00	METAL GLAZE	390	5%	1/10W	
			(KV-C2981A/C2981D/C2983E)			
	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
					(KV-C2980B)	
R200	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R201	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R202	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R203	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R204	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R205	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R206	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R207	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R210	1-216-025-00	METAL GLAZE	100	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R211	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R213	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R216	1-216-685-11	METAL CHIP	27K	0.50%	1/10W	
R217	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R219	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R221	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R222	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R223	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R224	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R305	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R308	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R309	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R311	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R313	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R315	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R316	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R317	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R318	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R319	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R320	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R321	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R322	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R323	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R325	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R326	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R327	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R328	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R329	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R330	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R331	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R332	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R333	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	
R340	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R341	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R342	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R352	1-216-123-11	METAL GLAZE	1.2M	5%	1/10W	
R354	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R355	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R356	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R364	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R365	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R368	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
			(KV-C2981A/C2981D/C2983E)			
R370	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R371	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R372	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R373	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R380	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R381	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R382	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R383	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R384	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R385	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R386	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R387	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R388	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R389	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R390	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R392	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R393	1-216-089-91	METAL GLAZE	47K	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION			REMARK
R401	1-216-039-00	METAL GLAZE	390	5%	1/10W
R402	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R403	1-216-039-00	METAL GLAZE	390	5%	1/10W
R404	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R405	1-216-039-00	METAL GLAZE	390	5%	1/10W
R406	1-216-039-00	METAL GLAZE	390	5%	1/10W
R407	1-216-198-91	METAL GLAZE	1K	5%	1/8W
R408	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R409	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R410	1-216-025-00	METAL GLAZE	100	5%	1/10W
R413	1-216-033-00	METAL GLAZE	220	5%	1/10W
R415	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R417	1-216-033-00	METAL GLAZE	220	5%	1/10W
R419	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R420	1-216-033-00	METAL GLAZE	220	5%	1/10W
R421	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R422	1-216-022-00	METAL GLAZE	75	5%	1/10W
R423	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R424	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R425	1-216-022-00	METAL GLAZE	75	5%	1/10W
R426	1-216-025-00	METAL GLAZE	100	5%	1/10W
R427	1-216-188-00	METAL GLAZE	390	5%	1/8W
R429	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R430	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R431	1-216-188-00	METAL GLAZE	390	5%	1/8W
R432	1-216-039-00	METAL GLAZE	390	5%	1/10W
R433	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R434	1-216-025-00	METAL GLAZE	100	5%	1/10W
R435	1-216-039-00	METAL GLAZE	390	5%	1/10W
R436	1-216-022-00	METAL GLAZE	75	5%	1/10W
R437	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R438	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R439	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R440	1-216-025-00	METAL GLAZE	100	5%	1/10W
R441	1-216-022-00	METAL GLAZE	75	5%	1/10W
R442	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R443	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R444	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R445	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R446	1-216-025-00	METAL GLAZE	100	5%	1/10W
R447	1-216-025-00	METAL GLAZE	100	5%	1/10W
R448	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R449	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R454	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R458	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R461	1-216-022-00	METAL GLAZE	75	5%	1/10W
R464	1-216-034-00	METAL GLAZE	240	5%	1/10W
R465	1-216-025-00	METAL GLAZE	100	5%	1/10W
R473	1-216-022-00	METAL GLAZE	75	5%	1/10W
R474	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R482	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R483	1-216-029-00	METAL GLAZE	150	5%	1/10W
R484	1-216-025-00	METAL GLAZE	100	5%	1/10W
R485	1-216-025-00	METAL GLAZE	100	5%	1/10W
R486	1-216-025-00	METAL GLAZE	100	5%	1/10W
R487	1-216-022-00	METAL GLAZE	75	5%	1/10W
R488	1-216-022-00	METAL GLAZE	75	5%	1/10W
R489	1-216-022-00	METAL GLAZE	75	5%	1/10W
R490	1-216-295-91	METAL GLAZE	0	5%	1/10W
R491	1-216-295-91	METAL GLAZE	0	5%	1/10W
R492	1-216-295-91	METAL GLAZE	0	5%	1/10W
	< R1001 - R1029 FITTED ON >				
	< KV-C2981A/C2981D/C2983E >				
R1001	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R1002	1-216-025-00	METAL GLAZE	100	5%	1/10W
R1004	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R1005	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1008	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R1009	1-216-025-00	METAL GLAZE	100	5%	1/10W
R1010	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1011	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1012	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1014	1-216-025-00	METAL GLAZE	100	5%	1/10W
R1015	1-216-025-00	METAL GLAZE	100	5%	1/10W
R1016	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R1025	1-216-033-00	METAL GLAZE	220	5%	1/10W
R1026	1-216-033-00	METAL GLAZE	220	5%	1/10W
R1027	1-216-033-00	METAL GLAZE	220	5%	1/10W
R1029	1-216-025-00	METAL GLAZE	100	5%	1/10W
	< R1101 - R1118 FITTED ON >				
	< KV-C2980B/C2983E >				
R1101	1-216-025-00	METAL GLAZE	100	5%	1/10W
R1102	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R1103	1-220-149-11	METAL GLAZE	2.2	10%	1/2W
R1104	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R1105	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1106	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R1107	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R1108	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R1109	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R1110	1-220-238-11	METAL GLAZE	10	5%	1/4W
R1111	1-216-025-00	METAL GLAZE	100	5%	1/10W
R1112	1-216-025-00	METAL GLAZE	100	5%	1/10W
R1113	1-216-117-00	METAL GLAZE	680K	5%	1/10W
R1114	1-216-158-00	METAL GLAZE	22	5%	1/8W
R1115	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R1116	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1117	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1118	1-220-149-11	METAL GLAZE	2.2	10%	1/2W
	< RESISTOR NETWORK >				
RA1	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)			
RA2	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)			
RA3	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)			
RA7	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)			
RA8	1-239-412-11	NETWORK, RESISTOR (CHIP TYPE)			
RA9	1-239-412-11	NETWORK, RESISTOR (CHIP TYPE)			
RA10	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)			
RA11	1-236-904-11	RESISTOR, NETWORK (CHIP TYPE)			
	< VARIABLE RESISTOR >				
RV102	1-241-765-11	RES, ADJ CARBON 22K (KV-C2980B)			
	< TUNER >				
TU101	8-598-045-01	TUNER (BTP-EC411)			

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The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
		< CRYSTAL >				
X2	1-579-063-21	VIBRATOR, CERAMIC				
X301	1-760-331-11	VIBRATOR, CRYSTAL				
X1001	1-567-495-11	OSCILLATOR, CRYSTAL (KV-C2981A/C2981D/C2983E)				
X1101	1-579-689-21	VIBRATOR, CRYSTAL (KV-C2980B/C2983E)				
**********						
	*A-1638-053-A	C BOARD, COMPLETE **********				
		< CAPACITOR >				
C702	1-102-824-00	CERAMIC	470PF	5%	50V	
C703	1-102-115-00	CERAMIC	560PF	10%	50V	
C704	1-102-116-00	CERAMIC	680PF	10%	50V	
C706	1-102-113-00	CERAMIC	390PF	10%	50V	
C706	1-102-822-00	CERAMIC	390PF	5%	50V	
C707	1-162-116-00	CERAMIC	680PF	10%	2KV	
C708	1-162-114-00	CERAMIC	0.0047MF		2KV	
C709	1-102-114-00	CERAMIC	470PF	10%	50V	
C710	1-123-947-00	ELECT	10MF	20%	250V	
C712	1-102-115-00	CERAMIC	560PF	10%	50V	
C714	1-124-360-00	ELECT	1000MF	20%	16V	
C717	1-102-114-00	CERAMIC	470PF	10%	50V	
C718	1-102-114-00	CERAMIC	470PF	10%	50V	
C719	1-102-114-00	CERAMIC	470PF	10%	50V	
		< CONNECTOR >				
CN702	1-695-915-11	TAB (CONTACT)				
CN703	*1-568-882-51	PIN, CONNECTOR 7P				
		< DIODE >				
D701	8-719-110-14	DIODE RD9.1ESB3				
D702	8-719-901-33	DIODE 1SS133				
D703	8-719-901-33	DIODE 1SS133				
D704	8-719-901-33	DIODE 1SS133				
D705	8-719-901-33	DIODE 1SS133				
D706	8-719-901-33	DIODE 1SS133				
D707	8-719-901-33	DIODE 1SS133				
D708	8-719-901-33	DIODE 1SS133				
D709	8-719-901-33	DIODE 1SS133				
D710	8-719-901-33	DIODE 1SS133				
D711	8-719-302-43	DIODE EL1Z				
D713	8-719-901-33	DIODE 1SS133				
		< CRT SOCKET >				
J701	! 1-526-990-21	SOCKET, CRT				
		< COIL >				
L704	1-408-609-41	INDUCTOR	33UH			
		< TRANSISTOR >				
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q703	8-729-906-70	TRANSISTOR BF871				
Q704	8-729-200-17	TRANSISTOR 2SA1091-O				
Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q706	8-729-906-70	TRANSISTOR BF871				
Q707	8-729-200-17	TRANSISTOR 2SA1091-O				
Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q709	8-729-906-70	TRANSISTOR BF871				
Q710	8-729-200-17	TRANSISTOR 2SA1091-O				
		< RESISTOR >				
R704	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R705	1-202-822-00	SOLID	2.2K	10%	1/2W	
R706	1-249-409-11	CARBON	220	5%	1/4W	
R707	1-249-408-11	CARBON	180	5%	1/4W	
R709	1-202-844-00	SOLID	330K	10%	1/2W	
R711	1-249-421-11	CARBON	2.2K	5%	1/4W	
R712	1-202-822-00	SOLID	2.2K	10%	1/2W	
R713	1-215-493-00	METAL	1M	1%	1/4W	
R714	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R715	1-249-417-11	CARBON	1K	5%	1/4W	
R716	1-249-409-11	CARBON	220	5%	1/4W	
R717	1-249-408-11	CARBON	180	5%	1/4W	
R718	1-202-814-11	SOLID	33K	10%	1/2W	
R720	1-249-421-11	CARBON	2.2K	5%	1/4W	
R722	1-202-848-00	SOLID	680K	10%	1/2W	
R723	1-249-417-11	CARBON	1K	5%	1/4W	
R724	1-202-846-00	SOLID	470K	10%	1/2W	
R726	1-202-822-00	SOLID	2.2K	10%	1/2W	
R727	1-249-409-11	CARBON	220	5%	1/4W	
R728	1-216-350-21	METAL OXIDE	1.2	5%	1W	F
R729	1-249-408-11	CARBON	180	5%	1/4W	
R731	1-249-421-11	CARBON	2.2K	5%	1/4W	
R732	1-215-479-00	METAL	270K	1%	1/4W	
R734	1-247-807-31	CARBON	100	5%	1/4W	
R736	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R737	1-215-485-00	METAL	470K	1%	1/4W	
R739	1-249-417-11	CARBON	1K	5%	1/4W	
R741	1-202-549-00	SOLID	100	20%	1/2W	
R743	1-202-842-11	SOLID	220K	10%	1/2W	
		< VARIABLE RESISTOR >				
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M				
RV702	1-241-656-11	RES, ADJ, METAL FILM 110M				
**********						
	*A-1642-125-A	COMPLETE PCB, D **********				
	4-201-023-01	SPACER, INSULATING				
	4-202-373-01	SPRING, IC				
	4-812-134-00	RIVET NYLON, 3.5				
		< CAPACITOR >				
C502	1-102-824-00	CERAMIC	470PF	5%	50V	
C503	1-136-165-00	FILM	0.1MF	5%	50V	
C504	1-102-824-00	CERAMIC	470PF	5%	50V	
C506	1-124-480-11	ELECT	470MF	20%	25V	
C507	1-124-767-00	ELECT	2.2MF	20%	50V	
C509	1-136-165-00	FILM	0.1MF	5%	50V	
C510	1-124-911-11	ELECT	220MF	20%	50V	
C511	1-136-202-11	FILM	0.33MF	5%	63V	
C513	1-106-220-00	MYLAR	0.1MF	10%	100V	
C514	1-136-165-00	FILM	0.1MF	5%	50V	
C515	1-124-480-11	ELECT	470MF	20%	25V	
C517	1-124-480-11	ELECT	470MF	20%	25V	
C518	1-102-228-00	CERAMIC	470PF	10%	500V	

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REF.NO.		PART NO.	DESCRIPTION			REMARK
C519		1-102-228-00	CERAMIC	470PF	10%	500V
C520		1-124-480-11	ELECT	470MF	20%	25V
C521		1-124-006-11	ELECT	10MF	20%	25V
C522		1-124-907-11	ELECT	10MF	20%	50V
C523		1-136-165-00	FILM	0.1MF	5%	50V
C600	⚠	**1-164-503-61**	**CERAMIC**	**0.0022MF**	**20%**	**400V**
C601	⚠	**1-161-964-91**	**CERAMIC**	**0.0047MF**		**250V**
C602	⚠	**1-161-964-91**	**CERAMIC**	**0.0047MF**		**250V**
C603		1-125-318-00	ELECT(BLOCK)	220MF	20%	400V
C604		1-124-122-11	ELECT	100MF	20%	50V
C605		1-124-667-11	ELECT	10MF	20%	100V
C606		1-162-318-11	CERAMIC	0.001MF	10%	500V
C607		1-124-120-11	ELECT	220MF	20%	25V
C608		1-109-880-11	FILM	0.0015MF	3%	2KV
C611		1-102-228-00	CERAMIC	470PF	10%	500V
C612		1-104-799-11	ELECT	22MF	20%	100V
C613		1-124-347-00	ELECT	100MF	20%	160V
C614		1-126-804-11	ELECT	100MF	20%	25V
C615		1-126-376-11	ELECT	470MF	20%	25V
C616		1-128-386-11	ELECT	1000MF	20%	25V
C617		1-126-183-11	ELECT	1000MF	20%	16V
C618		1-136-165-00	FILM	0.1MF	5%	50V
C619		1-102-228-00	CERAMIC	470PF	10%	500V
C620		1-102-228-00	CERAMIC	470PF	10%	500V
C621		1-136-165-00	FILM	0.1MF	5%	50V
C622		1-104-797-11	ELECT	0.47MF	20%	100V
C623		1-124-120-11	ELECT	220MF	20%	25V
C624		1-136-165-00	FILM	0.1MF	5%	50V
C625		1-124-910-11	ELECT	47MF	20%	50V
C626		1-124-120-11	ELECT	220MF	20%	25V
C627		1-124-120-11	ELECT	220MF	20%	25V
C628		1-124-907-11	ELECT	10MF	20%	50V
C629		1-126-800-51	ELECT	2200MF	20%	25V
C630		1-126-800-51	ELECT	2200MF	20%	25V
C631		1-124-916-11	ELECT	22MF	20%	50V
C632		1-124-120-11	ELECT	220MF	20%	25V
C633	⚠	**1-107-564-11**	**FILM**	**0.22MF**	**20%**	**300V**
C634	⚠	**1-107-564-11**	**FILM**	**0.22MF**	**20%**	**300V**
C635	⚠	**1-107-564-11**	**FILM**	**0.22MF**	**20%**	**300V**
C636	⚠	**1-164-503-61**	**CERAMIC**	**0.0022MF**	**20%**	**400V**
C639		1-136-165-00	FILM	0.1MF	5%	50V
C640		1-106-220-00	MYLAR	0.1MF	10%	100V
C647		1-162-116-00	CERAMIC	680PF	10%	2KV
C800		1-137-437-11	FILM	0.0056MF	5%	50V
C801		1-136-153-00	FILM	0.01MF	5%	50V
C804		1-136-165-00	FILM	0.1MF	5%	50V
C805		1-106-395-00	MYLAR	0.15MF	10%	200V
C806		1-108-704-11	MYLAR	0.1MF	10%	200V
C807		1-136-540-11	FILM	0.82MF	5%	200V
C810		1-124-634-11	ELECT	1MF	20%	250V
C811		1-102-212-00	CERAMIC	820PF	10%	500V
C812		1-136-112-00	FILM	1.4MF	5%	200V
C813		1-129-722-00	FILM	0.047MF	10%	630V
C814		1-136-591-11	FILM	0.017MF	3%	1.4KV
C815		1-136-562-11	MYLAR	0.0082MF	10%	400V
C816		1-161-754-00	CERAMIC	0.001MF	10%	2KV
C817		1-161-754-00	CERAMIC	0.001MF	10%	2KV
C818		1-162-116-00	CERAMIC	680PF	10%	2KV
C819		1-136-208-11	FILM	0.068MF	10%	250V
C820		1-102-114-00	CERAMIC	470PF	10%	50V
C821		1-162-114-00	CERAMIC	0.0047MF		2KV
C822		1-123-948-00	ELECT	22MF	20%	250V
C824		1-123-024-21	ELECT	33MF		160V
C829		1-124-902-00	ELECT	0.47MF	20%	50V
C830		1-124-902-00	ELECT	0.47MF	20%	50V
C832		1-124-903-11	ELECT	1MF	20%	50V
C834		1-126-233-11	ELECT	22MF	20%	25V
C835		1-162-318-11	CERAMIC	0.001MF	10%	500V
C836		1-162-117-00	CERAMIC	100PF	10%	500V
C838		1-102-228-00	CERAMIC	470PF	10%	500V
C839		1-161-744-00	CERAMIC	0.01MF		250V
C906		1-124-910-11	ELECT	47MF	20%	50V
C908		1-124-910-11	ELECT	47MF	20%	50V
C909		1-124-903-11	ELECT	1MF	20%	50V
C910		1-137-393-91	FILM	0.01MF	5%	100V
C1200		1-136-165-00	FILM	0.1MF	5%	50V
C1201		1-136-165-00	FILM	0.1MF	5%	50V
C1202		1-136-165-00	FILM	0.1MF	5%	50V
C1203		1-136-169-00	FILM	0.22MF	5%	50V
C1204		1-136-169-00	FILM	0.22MF	5%	50V
C1205		1-101-005-00	CERAMIC	0.022MF		50V
C1206		1-101-005-00	CERAMIC	0.022MF		50V
C1207		1-126-101-11	ELECT	100MF	20%	16V
C1208		1-124-927-11	ELECT	4.7MF	20%	50V
C1209		1-124-927-11	ELECT	4.7MF	20%	50V
C1210		1-124-925-11	ELECT	2.2MF	20%	50V
C1211		1-124-925-11	ELECT	2.2MF	20%	50V
C1214		1-126-101-11	ELECT	100MF	20%	16V
C1215		1-136-173-00	FILM	0.47MF	5%	50V
C1216		1-137-366-11	FILM	0.0022MF	5%	50V
C1217		1-137-366-11	FILM	0.0022MF	5%	50V
C1218		1-124-120-11	ELECT	220MF	20%	16V

< CONNECTOR >

CN600	⚠	**1-508-786-00**	**PIN, CONNECTOR (5MM PITCH) 2P**
CN601	⚠	**1-508-765-00**	**PIN, CONNECTOR (5MM PITCH) 3P**
CN602	⚠	***1-695-292-11**	**PIN, CONNECTOR (POWER)**
CN800		*1-580-798-11	CONNECTOR PIN (DY) 6P
CN803		1-695-915-11	TAB (CONTACT)
CN804		1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P
CN807		1-568-878-51	PIN, CONNECTOR 3P
CN901		*1-564-520-11	PLUG, CONNECTOR 5P
CN902		1-695-299-11	CONNECTOR, BOARD TO BOARD 50P
CN903		*1-564-516-11	PLUG, CONNECTOR 13P
CN904		*1-564-509-11	PLUG, CONNECTOR 6P
CN904		*1-568-881-51	PIN, CONNECTOR 6P
CN905		*1-564-506-11	PLUG, CONNECTOR 3P
CN905		*1-568-878-51	PIN, CONNECTOR 3P
CN1200		*1-568-879-11	PIN, CONNECTOR 4P
CN1201		*1-568-878-51	PIN, CONNECTOR 3P

< DIODE >

D500	8-719-109-85	DIODE RD5.1ESB2
D502	8-719-979-85	DIODE EGP20G
D503	8-719-979-85	DIODE EGP20G
D504	8-719-901-33	DIODE 1SS133
D505	8-719-982-03	DIODE MTZJ-3.6A
D506	8-719-901-33	DIODE 1SS133
D507	8-719-109-85	DIODE RD5.1ESB2
D600	8-719-510-53	DIODE D4SB60L

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The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
D601	8-719-046-77	DIODE EM1-V1	
D603	8-719-109-97	DIODE RD6.8ESB2	
D604	8-719-046-75	DIODE EU-1-V1	
D605	8-719-312-61	DIODE EU-1Z	
D606	8-719-312-61	DIODE EU-1Z	
D607	8-719-046-78	DIODE EG-1Z-V1	
D608	8-719-046-75	DIODE EU-1-V1	
D609	8-719-301-64	DIODE RU4DS	
D610	8-719-046-74	DIODE AU-01Z-V1	
D611	8-719-302-43	DIODE EL1Z	
D612	8-719-046-76	DIODE RU-3YX-V1	
D613	8-719-302-43	DIODE EL1Z	
D614	8-719-045-48	DIODE FML-G12S	
D615	8-719-046-75	DIODE EU-1-V1	
D616	8-719-110-03	DIODE RD7.5ESB2	
D617	8-719-901-33	DIODE 1SS133	
D618	8-719-901-33	DIODE 1SS133	
D619	8-719-901-33	DIODE 1SS133	
D620	8-719-901-33	DIODE 1SS133	
D622	8-719-921-69	DIODE MTZJ-9.1	
D625	8-719-901-33	DIODE 1SS133	
D626	8-719-046-74	DIODE AU-01Z-V1	
D800	8-719-901-33	DIODE 1SS133	
D801	8-719-901-33	DIODE 1SS133	
D802	8-719-901-33	DIODE 1SS133	
D803	8-719-908-03	DIODE GP08D	
D807	8-719-302-43	DIODE EL1Z	
D808	8-719-908-03	DIODE GP08D	
D809	8-719-018-82	DIODE RGP02-20EL-6494	
D810	8-719-302-43	DIODE EL1Z	
D812	8-719-038-49	DIODE FMS-3FU-LF027-103	
D815	8-719-908-03	DIODE GP08D	
D817	8-719-109-89	DIODE RD5.6ESB2	
D902	8-719-921-69	DIODE MTZJ-9.1	
D903	8-719-921-69	DIODE MTZJ-9.1	
D904	8-719-921-69	DIODE MTZJ-9.1	
D905	8-719-921-69	DIODE MTZJ-9.1	
D906	8-719-921-69	DIODE MTZJ-9.1	
D1201	8-719-109-72	DIODE RD-3.9ESB2	
		< FERRITE BEAD >	
FB600	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB601	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB602	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB605	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB606	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB607	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
		< IC >	
IC500	8-759-192-71	IC STV9379	
IC600	8-759-183-88	IC STR-S6708	
IC601 ⚠	8-749-924-92	IC TLP6212GB	
IC602	8-749-923-26	IC SE135N-F12	
IC603	8-759-171-05	IC UPC7805H	
IC604	8-759-250-63	IC TL750L05CLPR	
IC605	8-759-701-79	IC NJM7812FA	
IC606	8-759-267-25	IC LM2940T-90	
IC800	8-759-103-93	IC UPC393C	
IC1200	8-759-250-68	IC TDA7264	

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1201	8-759-502-21	IC TDA2822M	
		< COIL >	
JW150	1-408-113-00	INDUCTOR 4.7UH	
L502	1-412-519-11	INDUCTOR 3.3UH	
L503	1-412-519-11	INDUCTOR 3.3UH	
L609	1-412-533-21	INDUCTOR 47UH	
L611	1-412-527-11	INDUCTOR 15UH	
L612	1-414-415-11	INDUCTOR, WIDE BAND	
L613	1-414-415-11	INDUCTOR, WIDE BAND	
L800	1-459-087-00	COIL,HCC DUST CORE 3.9MMH	
L801	1-459-111-00	COIL, DRAM CORE (CDI)	
L802	1-459-104-00	COIL, WITH CORE	
L803	1-420-872-00	COIL, AIR CORE	
L804	1-409-771-11	COIL, HORIZONTAL LINEARITY	
L805	1-406-675-11	COIL, CHOKE 4.7MMH	
L809	1-412-533-21	INDUCTOR 47UH	
		< IC LINK >	
PS600 ⚠	1-532-686-21	LINK, IC 2.7A (ICP-N50)	
PS601 ⚠	1-532-686-21	LINK, IC 2.7A (ICP-N50)	
PS602 ⚠	1-532-686-21	LINK, IC 2.7A (ICP-N50)	
PS603 ⚠	1-532-686-21	LINK, IC 2.7A (ICP-N50)	
PS801 ⚠	1-532-605-91	LINK, IC 0.4A (ICP-N10)	
		< TRANSISTOR >	
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q502	8-729-173-38	TRANSISTOR 2SA733-K	
Q503	8-729-900-89	TRANSISTOR DTC144ES	
Q601	8-729-025-05	TRANSISTOR 2SC3852A-O	
Q602	8-729-320-28	TRANSISTOR 2SA1667	
Q603	8-729-024-35	TRANSISTOR 2SC2808STP-R	
Q604	8-729-024-35	TRANSISTOR 2SC2808STP-R	
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q606	8-729-900-65	TRANSISTOR DTA144ES	
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q800	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q801	8-729-017-06	TRANSISTOR 2SC4793	
Q802	8-729-016-32	TRANSISTOR 2SC4927-01	
Q803	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q805	8-729-900-89	TRANSISTOR DTC144ES	
Q1200	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1202	8-729-900-80	TRANSISTOR DTC114ES	
Q1203	8-729-900-74	TRANSISTOR DTC143TS	
Q1204	8-729-900-74	TRANSISTOR DTC143TS	
		< RESISTOR >	

R500	1-215-457-00	METAL	33K	1%	1/4W	
R502	1-249-421-11	CARBON	2.2K	5%	1/4W	
R503	1-249-429-11	CARBON	10K	5%	1/4W	
R504	1-215-459-00	METAL	39K	1%	1/4W	
R505	1-249-382-11	CARBON	1.2	5%	1/4W	F
R506	1-215-447-00	METAL	12K	1%	1/4W	
R507	1-215-888-00	METAL OXIDE	220	5%	2W	F
R508	1-216-371-00	METAL OXIDE	1.5	5%	2W	F
R509	1-249-443-11	CARBON	0.47	5%	1/4W	F
R510	1-249-443-11	CARBON	0.47	5%	1/4W	F

The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

REF.NO.		PART NO.	DESCRIPTION				REMARK
R517		1-215-427-00	METAL	1.8K	1%	1/4W	
R518		1-215-427-00	METAL	1.8K	1%	1/4W	
R520		1-215-457-00	METAL	33K	1%	1/4W	
R521		1-215-461-00	METAL	47K	1%	1/4W	
R522		1-249-433-11	CARBON	22K	5%	1/4W	
R523		1-249-433-11	CARBON	22K	5%	1/4W	
R524		1-249-425-11	CARBON	4.7K	5%	1/4W	
R525		1-249-425-11	CARBON	4.7K	5%	1/4W	
R526		1-249-421-11	CARBON	2.2K	5%	1/4W	
R528		1-259-880-11	CARBON	2.2M	5%	1/4W	
R529		1-247-895-00	CARBON	470K	5%	1/4W	
R600		1-216-490-11	METAL OXIDE	39K	5%	3W	F
R601		1-249-417-11	CARBON	1K	5%	1/4W	
R603		1-215-875-11	METAL OXIDE	10K	5%	1W	F
R604		1-249-420-11	CARBON	1.8K	5%	1/4W	
R605		1-216-362-11	METAL OXIDE	0.27	5%	2W	F
R607		1-216-421-71	METAL OXIDE	12	5%	1W	F
R608		1-216-365-00	METAL OXIDE	0.47	5%	2W	F
R610		1-215-427-00	METAL	1.8K	1%	1/4W	
R611		1-215-859-00	METAL OXIDE	22	5%	1W	F
R612		1-249-428-11	CARBON	8.2K	5%	1/4W	
R613		1-249-417-11	CARBON	1K	5%	1/4W	
R614		1-215-877-11	METAL OXIDE	22K	5%	1W	F
R615		1-249-435-11	CARBON	33K	5%	1/4W	
R616		1-215-479-00	METAL	270K	1%	1/4W	
R617		1-215-901-00	METAL OXIDE	33K	5%	2W	F
R618		1-249-433-11	CARBON	22K	5%	1/4W	
R619		1-216-425-11	METAL OXIDE	56	5%	1W	F
R620		1-247-895-00	CARBON	470K	5%	1/4W	
R621		1-216-425-11	METAL OXIDE	56	5%	1W	F
R622		1-249-437-11	CARBON	47K	5%	1/4W	
R623		1-249-429-11	CARBON	10K	5%	1/4W	
R624		1-249-405-11	CARBON	100	5%	1/4W	F
R625		1-249-434-11	CARBON	27K	5%	1/4W	
R626		1-249-430-11	CARBON	12K	5%	1/4W	
R628		1-249-415-11	CARBON	680	5%	1/4W	F
R629	⚠	**1-244-945-91**	**CARBON**	**1M**	**5%**	**1/2W**	
R630	⚠	**1-218-265-11**	**METAL**	**8.2M**	**5%**	**1W**	
R631	⚠	**1-205-949-11**	**WIREWOUND**	**1.8**	**5%**	**10W**	
R632		1-247-807-31	CARBON	100	5%	1/4W	
R633		1-247-807-31	CARBON	100	5%	1/4W	
R634		1-249-397-11	CARBON	22	5%	1/4W	F
R635		1-249-437-11	CARBON	47K	5%	1/4W	
R636		1-249-417-11	CARBON	1K	5%	1/4W	
R637		1-249-409-11	CARBON	220	5%	1/4W	
R638		1-249-433-11	CARBON	22K	5%	1/4W	
R639		1-215-427-00	METAL	1.8K	1%	1/4W	
R640		1-216-381-11	METAL OXIDE	0.22	5%	3W	F
R641		1-216-381-11	METAL OXIDE	0.22	5%	3W	F
R642	⚠	**1-205-949-11**	**WIREWOUND**	**1.8**	**5%**	**10W**	
R644		1-247-807-31	CARBON	100	5%	1/4W	
R645		1-249-422-11	CARBON	2.7K	5%	1/4W	
R646		1-249-377-11	CARBON	0.47	5%	1/4W	F
R647		1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R648		1-216-397-11	METAL OXIDE	4.7	5%	3W	F
R800		1-249-421-11	CARBON	2.2K	5%	1/4W	
R801		1-249-429-11	CARBON	10K	5%	1/4W	
R802		1-249-431-11	CARBON	15K	5%	1/4W	
R803		1-249-423-11	CARBON	3.3K	5%	1/4W	
R804		1-249-430-11	CARBON	12K	5%	1/4W	

REF.NO.		PART NO.	DESCRIPTION				REMARK
R805		1-249-425-11	CARBON	4.7K	5%	1/4W	
R812		1-249-421-11	CARBON	2.2K	5%	1/4W	
R813		1-215-867-00	METAL OXIDE	470	5%	1W	F
R814		1-249-411-11	CARBON	330	5%	1/4W	
R816		1-216-481-11	METAL OXIDE	1.2K	5%	3W	F
R817		1-216-481-11	METAL OXIDE	1.2K	5%	3W	F
R818		1-215-882-00	METAL OXIDE	22	5%	2W	F
R819		1-216-345-11	METAL OXIDE	0.47	5%	1W	F
R820		1-249-403-11	CARBON	68	5%	1/4W	
R821		1-215-909-11	METAL OXIDE	47	5%	3W	F
R822		1-215-868-00	METAL OXIDE	680	5%	1W	F
R824		1-249-420-11	CARBON	1.8K	5%	1/4W	
R826		1-247-752-11	CARBON	1K	5%	1/2W	
R827		1-249-425-11	CARBON	4.7K	5%	1/4W	
R828		1-249-430-11	CARBON	12K	5%	1/4W	
R829		1-249-493-11	CARBON	56K	5%	1/2W	
R830		1-217-778-11	FUSIBLE	1K	5%	1W	F
R833		1-249-421-11	CARBON	2.2K	5%	1/4W	F
R836		1-249-439-11	CARBON	68K	5%	1/4W	
R837		1-249-431-11	CARBON	15K	5%	1/4W	
R840		1-247-807-31	CARBON	100	5%	1/4W	
R841		1-249-418-11	CARBON	1.2K	5%	1/4W	
R842		1-249-441-11	CARBON	100K	5%	1/4W	
R843		1-247-893-11	CARBON	390K	5%	1/4W	
R846		1-249-441-11	CARBON	100K	5%	1/4W	
R847		1-247-891-00	CARBON	330K	5%	1/4W	
R848		1-247-887-00	CARBON	220K	5%	1/4W	
R849		1-249-429-11	CARBON	10K	5%	1/4W	
R850		1-249-425-11	CARBON	4.7K	5%	1/4W	
R851		1-215-898-11	METAL OXIDE	10K	5%	2W	F
R852		1-249-432-11	CARBON	18K	5%	1/4W	
R901		1-202-539-00	SOLID	39	10%	1/2W	
R902		1-202-539-00	SOLID	39	10%	1/2W	
R907		1-247-804-11	CARBON	75	5%	1/4W	
R916		1-249-397-11	CARBON	22	5%	1/4W	
R917		1-249-397-11	CARBON	22	5%	1/4W	
R1200		1-249-425-11	CARBON	4.7K	5%	1/4W	
R1201		1-249-434-11	CARBON	27K	5%	1/4W	
R1202		1-249-393-11	CARBON	10	5%	1/4W	F
R1203		1-249-421-11	CARBON	2.2K	5%	1/4W	
R1204		1-249-421-11	CARBON	2.2K	5%	1/4W	
R1205		1-249-428-11	CARBON	8.2K	5%	1/4W	
R1206		1-249-428-11	CARBON	8.2K	5%	1/4W	
R1207	⚠	**1-249-417-11**	**CARBON**	**1K**	**5%**	**1/4W**	
R1208		1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1209		1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1210	⚠	**1-249-417-11**	**CARBON**	**1K**	**5%**	**1/4W**	
R1211		1-249-424-11	CARBON	3.9K	5%	1/4W	
R1212		1-249-424-11	CARBON	3.9K	5%	1/4W	
R1213		1-249-421-11	CARBON	2.2K	5%	1/4W	
R1216		1-249-413-11	CARBON	470	5%	1/4W	
R1217		1-249-425-11	CARBON	4.7K	5%	1/4W	

< VARIABLE RESISTOR >

RV301		1-238-552-11	RES, ADJ, CARBON 470K

< RELAY >

RY600	⚠	1-515-720-31	RELAY

D VM H1

The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
		< SPARK GAP >				
SG801	1-519-422-11	GAP, SPARK				
		< TRANSFORMER >				
LF600 ⚠	1-421-776-11	LFT				
LF601 ⚠	1-421-776-11	LFT				
T601 ⚠	1-426-805-11	TRANSFORMER				
T800	1-424-545-11	TRANSFORMER, FERRITE (PMT)				
T803 ⚠	1-453-169-11	TRANSFORMER ASSY, FLYBACK (UX-1604A2)				
T804	1-437-090-00	HDT				
		< THERMISTOR >				
THP600 ⚠	1-809-827-11	THERMISTOR, POSITIVE				
**********						
	*A-1644-052-A	VM BOARD, COMPLETE				
		**********				
	*4-368-683-21	SPRING, TRANSISTOR				
		< CAPACITOR >				
C1701	1-124-119-00	ELECT	330MF	20%	16V	
C1702	1-101-880-00	CERAMIC	47PF	5%	50V	
C1703	1-102-115-00	CERAMIC	560PF	10%	50V	
C1704	1-161-830-00	CERAMIC	0.0047MF		500V	
C1705	1-124-120-11	ELECT	220MF	20%	16V	
C1706	1-123-935-00	ELECT	33MF	20%	160V	
C1707	1-124-907-11	ELECT	10MF	20%	50V	
C1708	1-101-006-00	CERAMIC	0.047MF		50V	
C1709	1-108-704-11	MYLAR	0.1MF	10%	200V	
C1710	1-136-207-11	FILM	0.047MF	10%	250V	
C1711	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C1712	1-124-799-11	ELECT	2.2MF	20%	160V	
C1713	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C1714	1-136-207-11	FILM	0.047MF	10%	250V	
C1716	1-124-907-11	ELECT	10MF	20%	50V	
C1718	1-124-120-11	ELECT	220MF	20%	16V	
C1719	1-124-927-11	ELECT	4.7MF	20%	50V	
		< CONNECTOR >				
CN1819	*1-568-882-51	PIN, CONNECTOR 7P				
		< DIODE >				
D1701	8-719-901-33	DIODE 1SS133				
D1702	8-719-901-33	DIODE 1SS133				
D1703	8-719-901-33	DIODE 1SS133				
D1704	8-719-982-37	DIODE MTZJ-39C				
D1705	8-719-982-37	DIODE MTZJ-39C				
D1706	8-719-901-33	DIODE 1SS133				
D1707	8-719-901-33	DIODE 1SS133				
		< COIL >				
L1701	1-408-417-00	INDUCTOR	47UH			
L1702	1-408-418-00	INDUCTOR	56UH			
		< TRANSISTOR >				
Q1701	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1702	8-729-173-38	TRANSISTOR 2SA733-K				
Q1703	8-729-017-05	TRANSISTOR 2SA1837				
Q1704	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1705	8-729-017-06	TRANSISTOR 2SC4793				
Q1706	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1707	8-729-140-96	TRANSISTOR 2SD774-34				
Q1708	8-729-901-59	TRANSISTOR BF199				
Q1709	8-729-255-12	TRANSISTOR 2SC2551-O				
		< RESISTOR >				
R1701	1-247-807-31	CARBON	100	5%	1/4W	
R1702	1-249-420-11	CARBON	1.8K	5%	1/4W	
R1703	1-247-807-31	CARBON	100	5%	1/4W	
R1704	1-249-420-11	CARBON	1.8K	5%	1/4W	
R1705	1-247-736-11	CARBON	56	5%	1/2W	F
R1706	1-249-414-11	CARBON	560	5%	1/4W	F
R1707	1-249-412-11	CARBON	390	5%	1/4W	
R1709	1-249-416-11	CARBON	820	5%	1/4W	
R1710	1-249-385-11	CARBON	2.2	5%	1/4W	F
R1711	1-249-432-11	CARBON	18K	5%	1/4W	
R1712	1-249-435-11	CARBON	33K	5%	1/4W	
R1713	1-249-438-11	CARBON	56K	5%	1/4W	
R1714	1-249-429-11	CARBON	10K	5%	1/4W	
R1715	1-216-476-11	METAL OXIDE	180	5%	3W	!
R1716	1-249-417-11	CARBON	1K	5%	1/4W	!
R1717	1-249-432-11	CARBON	18K	5%	1/4W	
R1718	1-249-410-11	CARBON	270	5%	1/4W	
R1719	1-249-419-11	CARBON	1.5K	5%	1/4W	
R1720	1-249-441-11	CARBON	100K	5%	1/4W	
R1721	1-249-414-11	CARBON	560	5%	1/4W	
R1722	1-249-385-11	CARBON	2.2	5%	1/4W	!
R1723	1-249-429-11	CARBON	10K	5%	1/4W	
R1724	1-249-436-11	CARBON	39K	5%	1/4W	
R1725	1-249-417-11	CARBON	1K	5%	1/4W	
R1726	1-249-411-11	CARBON	330	5%	1/4W	
R1727	1-249-402-11	CARBON	56	5%	1/4W	!
R1729	1-216-451-11	METAL OXIDE	120	5%	2W	!
R1731	1-249-420-11	CARBON	1.8K	5%	1/4W	
R1732	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1734	1-249-419-11	CARBON	1.5K	5%	1/4W	
**********						
	*1-652-275-11	H1 BOARD				
		********				
		< CAPACITOR >				
C900	1-101-810-00	CERAMIC	100PF	5%	50V	
C901	1-101-810-00	CERAMIC	100PF	5%	50V	
C902	1-137-372-11	FILM	0.022MF	5%	50V	
C903	1-137-372-11	FILM	0.022MF	5%	50V	
C907	1-124-903-11	ELECT	1MF	20%	50V	
		< CONNECTOR >				
CN900	1-568-678-21	TERMINAL BLOCK, S 3P				
CN906	*1-564-516-11	PLUG, CONNECTOR 13P				
		< SOCKET >				
J900	1-764-606-11	JACK				

The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

H1 H2 H3

REF.NO.	PART NO.	DESCRIPTION			REMARK
		< COIL >			
L900	1-408-409-00	INDUCTOR	10UH		
L901	1-408-409-00	INDUCTOR	10UH		
L902	1-408-409-00	INDUCTOR	10UH		
L903	1-408-409-00	INDUCTOR	10UH		
		< RESISTOR >			
R905	1-247-804-11	CARBON	75	5% 1/4W	
R906	1-247-804-11	CARBON	75	5% 1/4W	
R909	1-249-437-11	CARBON	47K	5% 1/4W	
R910	1-249-437-11	CARBON	47K	5% 1/4W	
R915	1-249-397-11	CARBON	22	5% 1/4W	
**********					
	*1-652-269-11	H2 BOARD			
		********			
		< CAPACITOR >			
C904	1-124-910-11	ELECT	47MF	20% 50V	
C905	1-124-907-11	ELECT	10MF	20% 50V	
		< CONNECTOR >			
CN907	*1-568-881-51	PIN, CONNECTOR 6P			
		< DIODE >			
D901	8-719-030-11	DIODE SLA-570KT3F			
	4-202-707-01	HOLDER, LED (D901)			
		< IC >			
IC900	8-741-790-11	IC SBX1790-11			
		< RESISTOR >			
R900	1-249-409-11	CARBON	220	5% 1/4W	
R908	1-249-401-11	CARBON	47	5% 1/4W	
**********					
	*1-652-270-11	H3 BOARD			
		********			
		< CAPACITOR >			
CN908	*1-564-506-11	PLUG, CONNECTOR 3P			
CN908	*1-568-878-51	PIN, CONNECTOR 3P			
		< RESISTOR >			
R911	1-249-423-11	CARBON	3.3K	5% 1/4W	
R912	1-249-429-11	CARBON	10K	5% 1/4W	
R913	1-249-423-11	CARBON	3.3K	5% 1/4W	
R914	1-249-429-11	CARBON	10K	5% 1/4W	
		< SWITCH >			
S900	1-692-979-11	SWITCH, TACTILE			
S901	1-692-979-11	SWITCH, TACTILE			
S902	1-692-979-11	SWITCH, TACTILE			

REF.NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANEOUS	
		**********	
⚠	1-571-433-11	SWITCH, PUSH (AC POWER)	
⚠	1-751-680-11	CORD, POWER (WITH NOISE FILTER) (KV-C2981A/C2981D)	
⚠	1-590-460-11	CORD, POWER (WITH CONNECTOR) (KV-C2980B/C2983E)	
⚠	1-453-169-11	TRANSFORMER ASSY, FLYBACK (UX-1604A2)	
	8-598-045-01	TUNER (BTP-EC411)	
⚠	8-451-313-61	DEFLECTION YOKE (Y29FXA)	
⚠	1-402-747-21	COIL, DEGAUSSING	
	1-504-146-11	SPEAKER (5X11CM)	
	1-452-032-00	MAGNET, DISK; 10MM	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM	
⚠	1-452-509-41	NECK ASSY, CRT (NA308)	
V901 ⚠	8-733-831-05	PICTURE TUBE SD-191 (A68JYL61X)	
**********			
		ACCESSORIES AND PACKING MATERIALS	
		**********	
	4-202-767-41	MANUAL, INSTRUCTION (KV-C2981A)	
	4-202-767-51	MANUAL, INSTRUCTION (KV-C2980B)	
	4-202-767-91	MANUAL, INSTRUCTION (KV-C2981D)	
	4-202-767-71	MANUAL, INSTRUCTION (KV-C2983E)	
	*4-039-906-01	BAG, PROTECTION	
	*4-202-006-01	CUSHION (UPPER) (ASSY)	
	*4-202-009-01	CUSHION (LOWER) (ASSY)	
	*4-202-005-01	INDIVIDUAL CARTON	
		REMOTE COMMANDER	
		**********	
	1-467-706-11	REMOTE COMMANDER (RM-833)	
**********			

SERVICE MANUAL

BE-3B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-C2981A	RM-833	Italian	SCC-G81E-A	KV-C2983E	RM-833	Spanish	SCC-G82G-A
KV-C2980B	RM-833	French	SCC-G85E-A				

SUPPLEMENT - 1

SUBJECT : CHANGE OF PART NUMBERS

File this supplement with the service manual

INTRODUCTION : Change in part numbers for models with serial numbers begining at.

KV-C2981A	4500001	~
KV-C2980B	4500001	~
KV-C2983E	4500001	~

- **SECTION 6 EXPLODED VIEWS**
  - 6-1. CHASSIS (Page 57)
  - 6-2 PICTURE TUBE (Page 58)
- **SECTION 7 ELECTRICAL PARTS LIST** (Page 59)

MICROFILM

TRINITRON® COLOR TV

SONY®

EXPLODED VIEWS

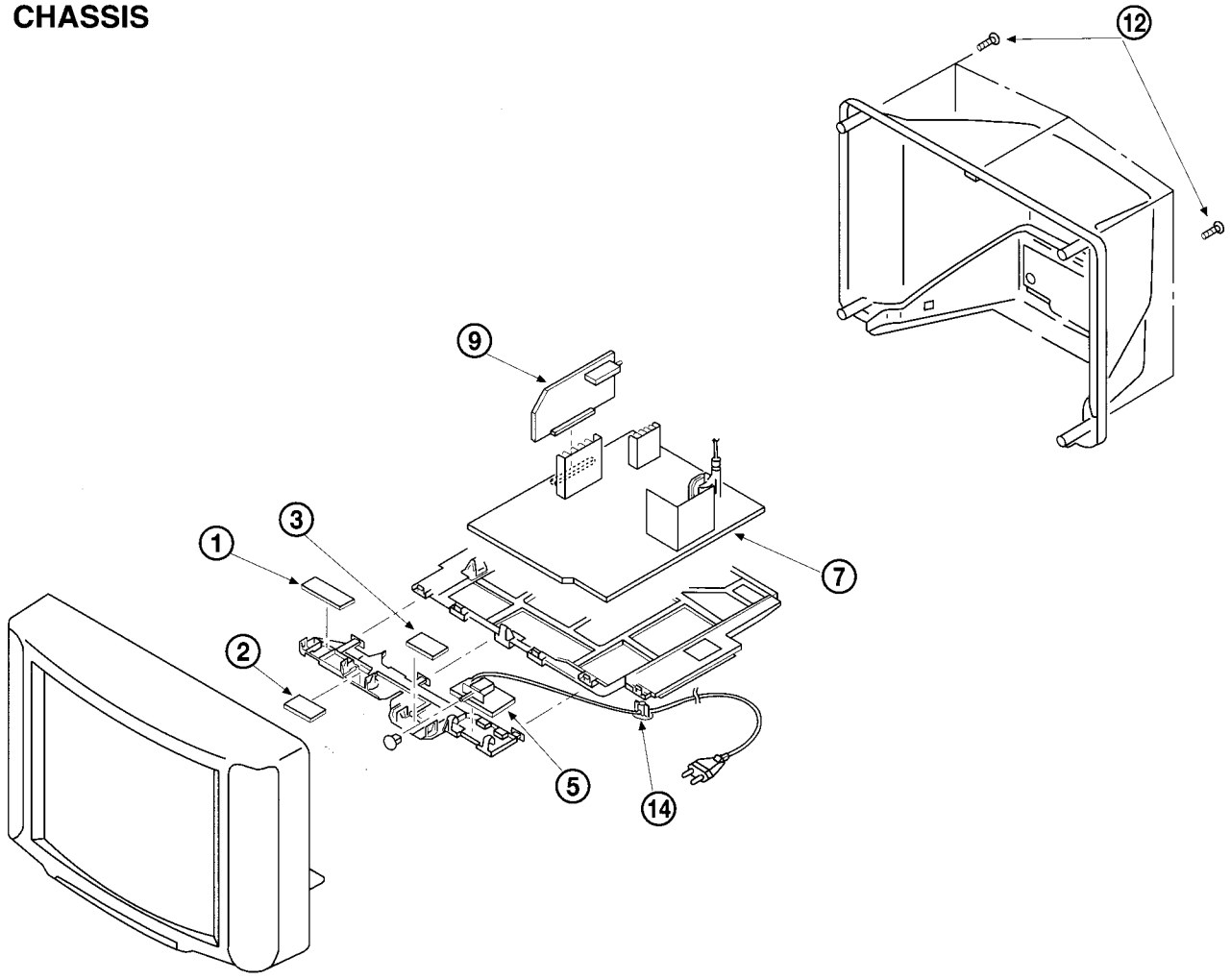
NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

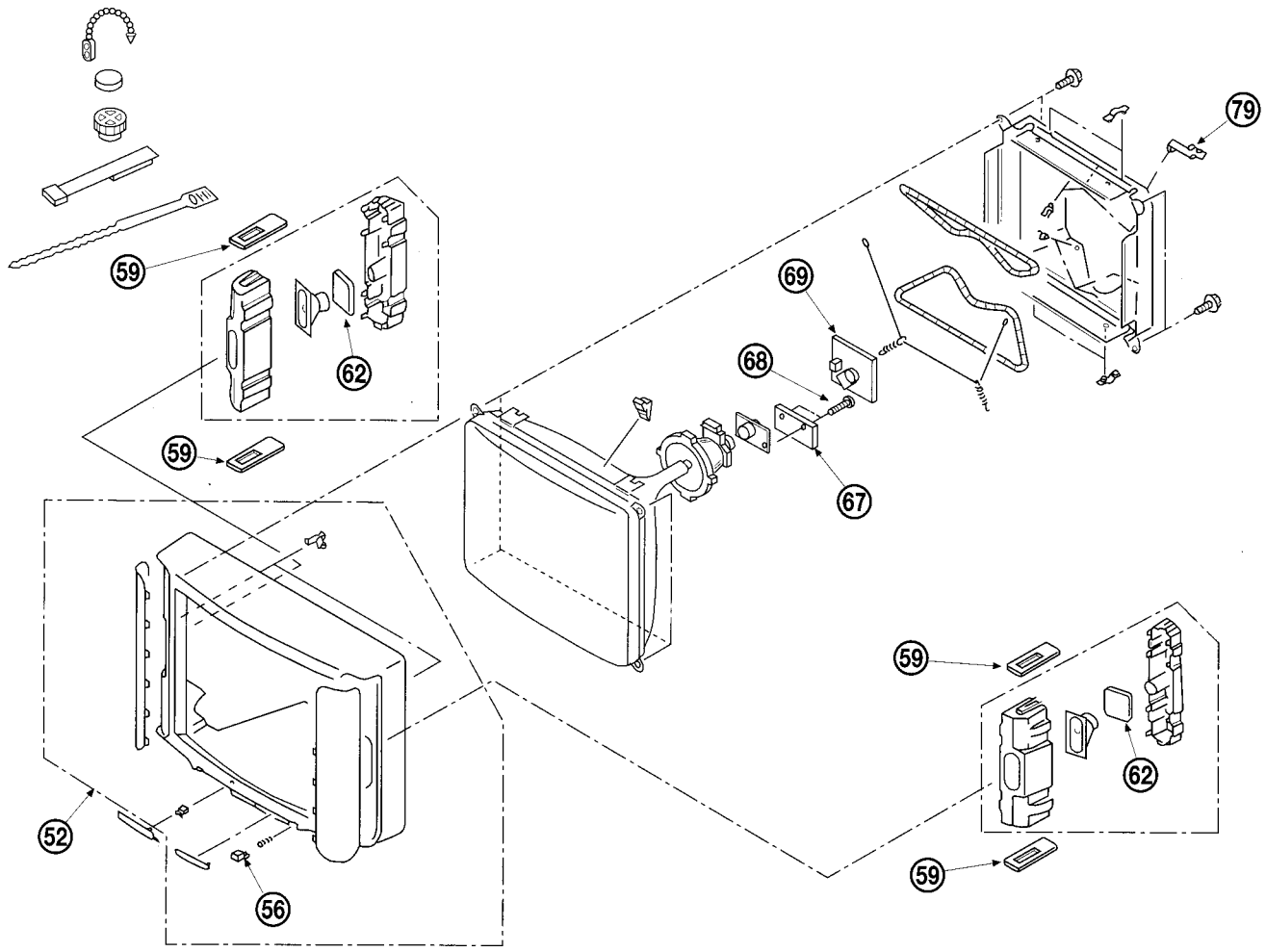
Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

6-1. CHASSIS



REF NO		PART NO	DESCRIPTION	REMARK
1		*1-656-264-11	H1 BOARD	
2		*1-656-266-11	H3 BOARD	
3		*1-656-265-11	H2 BOARD	
5		*1-656-267-11	F1 BOARD	
7		*A-1642-153-A	D BOARD, COMPLETE	
9		*A-1632-285-A	A BOARD, COMPLETE	(KV-C2981A)
		*A-1632-286-A	A BOARD, COMPLETE	(KV-C2980B)
		*A-1632-287-A	A BOARD, COMPLETE	(KV-C2983E)
12		7-685-663-79	SCREW +BVTP 4X16	
14	⚠	4-202-531-01	AC CORD LOCK (SC)	

6-2. PICTURE TUBE



REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
52	X-4200-220-1	BEZNET ASSY					
56	4-202-022-01	BUTTON, POWER					
59	4-202-027-01	CUSHION, BOX					
62	4-202-029-01	STOPPER					
67	*A-1644-062-A	VM BOARD, COMPLETE					
68	4-039-356-01	SCREW (3X8), (+) BV TAPPING					
69	*A-1638-066-A	C BOARD, COMPLETE					
79	4-387-284-01	HOLDER, LEAD					

ELECTRICAL PARTS LIST

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS MF : mF, PF : mmF

COILS MMH : mH, μH : mH

The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1632-285-A	A BOARD, COMPLETE (KV-C2981A)	
		**********	
	*A-1632-286-A	A BOARD, COMPLETE (KV-C2980B)	
		**********	
	*A-1632-287-A	A BOARD, COMPLETE (KV-C2983E)	
		**********	
		< CAPACITOR >	
C24	1-163-108-00	CERAMIC CHIP 43PF 5% 50V	
C118	1-164-489-11	CERAMIC CHIP 0.22MF 10% 16V	
C145	1-216-295-91	CONDUCTOR, CHIP (KV-C2981A)	
	1-163-093-00	CERAMIC CHIP 10PF 5% 50V	(KV-C2980B/C2983E)
C146	1-216-295-91	CONDUCTOR, CHIP (KV-C2981A)	
	1-163-093-00	CERAMIC CHIP 10PF 5% 50V	(KV-C2980B/C2983E)
C154	1-163-113-00	CERAMIC CHIP 68PF 5% 50V	(KV-C2981A/C2983E)
C155	1-163-093-00	CERAMIC CHIP 10PF 5% 50V	(KV-C2981A/C2983E)
C157	1-163-105-00	CERAMIC CHIP 33PF 5% 50V	(KV-C2981A/C2983E)
C362	1-163-109-00	CERAMIC CHIP 47PF 5% 50V	
C1003	1-163-037-11	CERAMIC CHIP 0.022MF 10% 25V	(KV-C2981A/C2983E)
C1006	1-163-037-11	CERAMIC CHIP 0.022MF 10% 25V	(KV-C2981A/C2983E)
		< DIODE >	
D399	8-719-923-30	DIODE MTZJ-T-77-4.7B	
		< INDUCTOR >	
L2	1-410-385-11	INDUCTOR CHIP 22UH	
L105	1-408-410-00	INDUCTOR 12UH	(KV-C2981A/C2983E)
L108	1-408-609-41	INDUCTOR 33UH	(KV-C2981A/C2983E)
		< TRANSISTOR >	
Q399	8-729-901-01	TRANSISTOR DTC144EK	
		< RESISTOR >	
R124	1-216-031-00	METAL GLAZE 180 5% 1/10W	
R152	1-216-174-00	METAL GLAZE 100 5% 1/8W	
R199	1-216-049-91	METAL GLAZE 1K 5% 1/10W	(KV-C2981A/C2983E)
R220	1-216-174-00	METAL GLAZE 100 5% 1/8W	
R394	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R395	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R399	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
		**********	
	*A-1638-066-A	C BOARD, COMPLETE	
		**********	
		< CONNECTOR >	
CN701	1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P	
		< DIODE >	
D703	1-535-143-11	LEAD, JUMPER (10.0MM)	
D704	1-535-143-11	LEAD, JUMPER (10.0MM)	
D705	1-535-143-11	LEAD, JUMPER (10.0MM)	
D714	8-719-110-08	DIODE HZ9A1	
D715	8-719-110-08	DIODE HZ9A1	
D716	8-719-110-08	DIODE HZ9A1	
D717	8-719-110-08	DIODE HZ9A1	
D718	8-719-110-08	DIODE HZ9A1	
D719	8-719-110-08	DIODE HZ9A1	
		< RESISTOR >	
R744	1-249-426-11	CARBON 5.6K 5% 1/4W	
R745	1-249-426-11	CARBON 5.6K 5% 1/4W	
R746	1-249-426-11	CARBON 5.6K 5% 1/4W	
		**********	
	*A-1642-153-A	D BOARD, COMPLETE	
		**********	
		< CAPACITOR >	
C501	1-102-074-00	CERAMIC 0.001MF 10% 50V	
C1216	1-137-365-11	FILM 0.0015MF 5% 50V	
C1217	1-137-365-11	FILM 0.0015MF 5% 50V	
		<COIL>	
L804	1-406-903-11	COIL, HORIZONTAL LINEARITY	

9-974-866-81

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Consumer A & V Products Company
TV & Display Products Div.

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SERVICE MANUAL

BE-3B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-C2981A	RM-833	Italian	SCC-G81E-A	KV-C2981D	RM-833	AEP	SCC-G77C-A

SUPPLEMENT - 2

SUBJECT : CHANGE OF PART NUMBERS

File this supplement with the service manual

INTRODUCTION : Change in part numbers for KV-C2981D with serial number beginning at 600001.

- **SECTION 5 DIAGRAMS** (C board, Page 53) ..... See page 3
  (A board, Page 44) ..... See page 5
- **SECTION 6 EXPLODED VIEWS**

6-1. CHASSIS (Page 57) ..... See page 8
6-2. PICTURE TUBE (Page 58) ..... See page 9

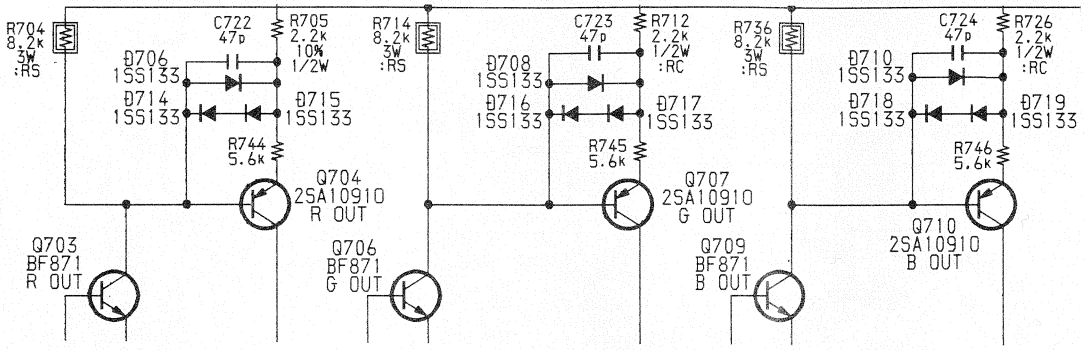
- **SECTION 7 ELECTRICAL PARTS LIST** (Page 59) ..... See page 10

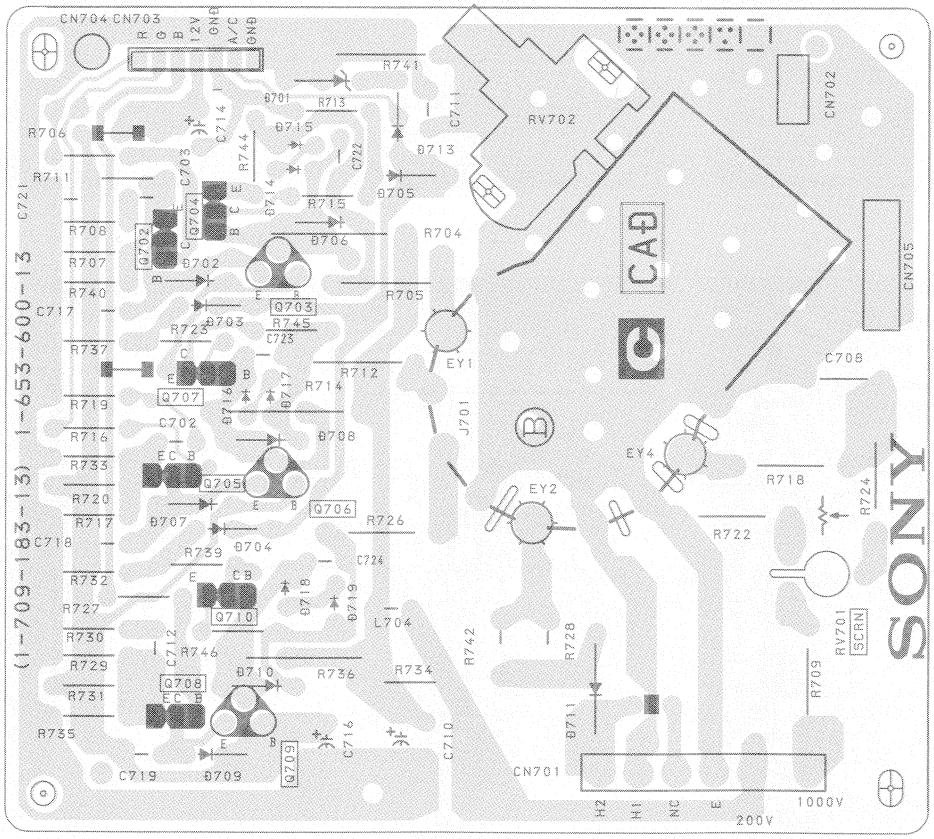
MICROFILM

TRINITRON® COLOR TV
SONY®

C [RGB OUT]

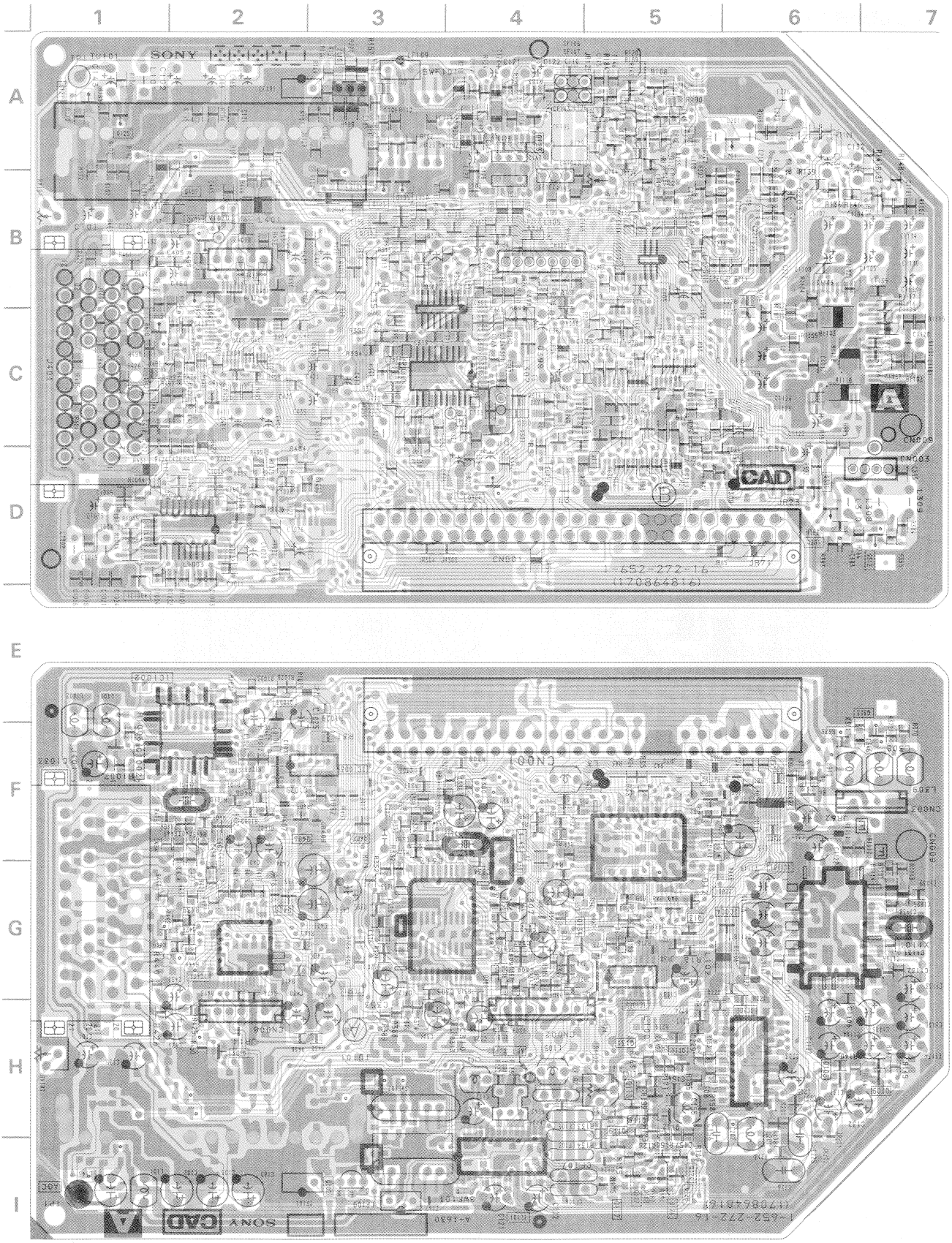
– C BOARD –





A TUNER AUDIO CONTROL
AUDIO AMP AV SW
RGB JUNGLE YC PROCESSOR

– A BOARD –



A BOARD

IC

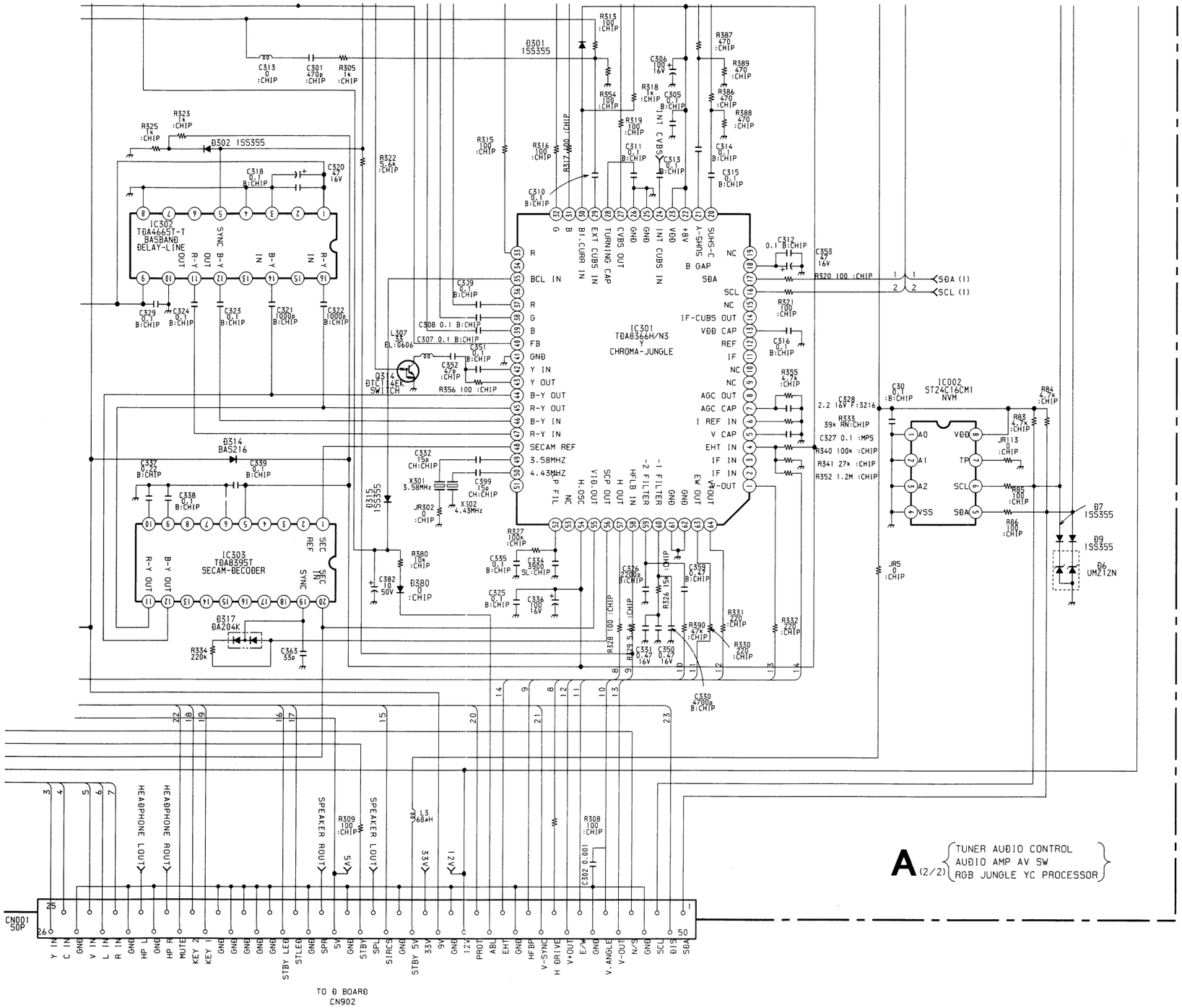
IC001	G-5
IC002	F-6
IC003	D-4
IC101	I-4
IC201	H-6
IC202	B-5
IC301	G-3
IC302	B-4
IC303	C-4
IC401	G-2
IC1001	D-1
IC1002	E-1
IC1003	F-3

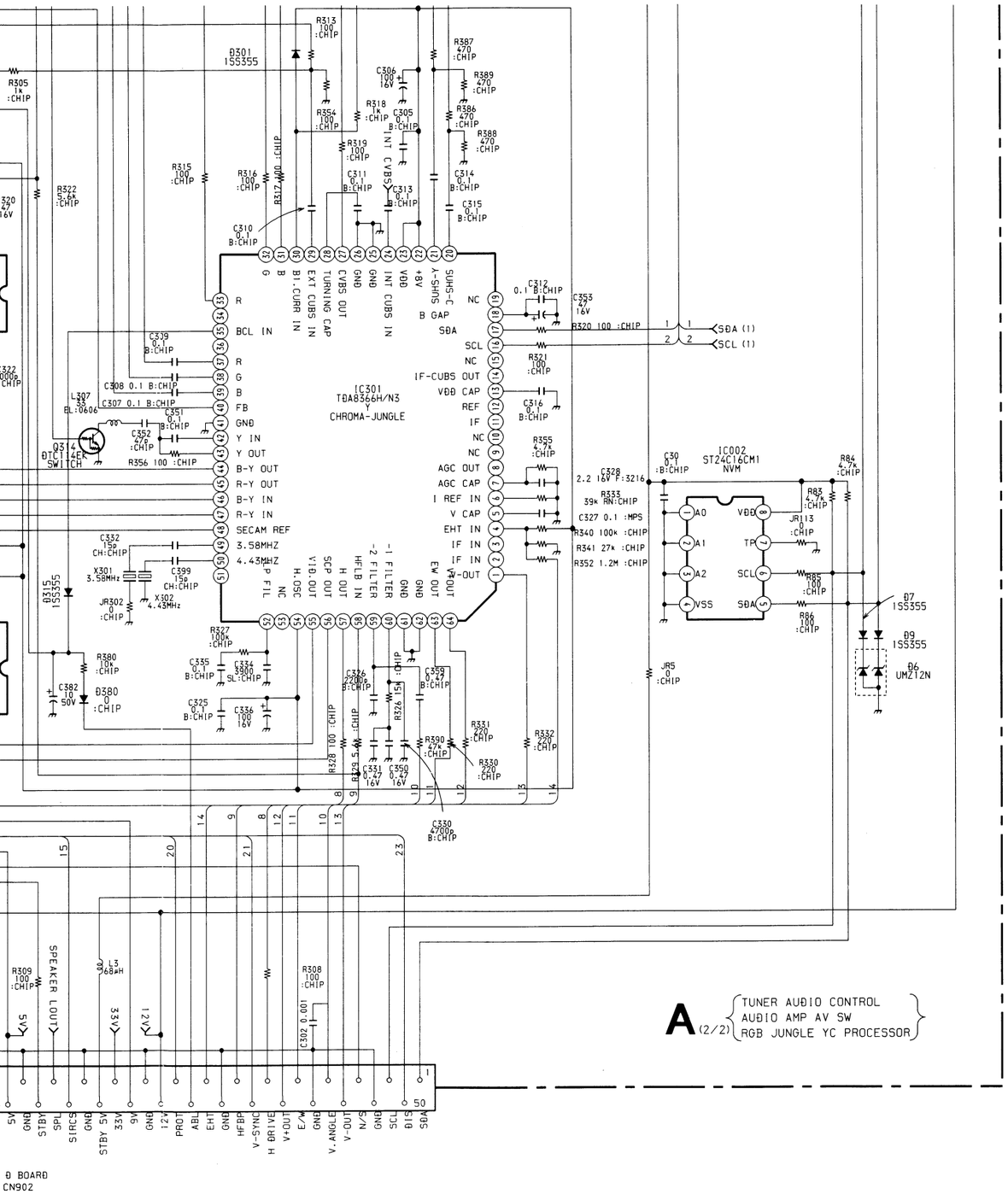
TRANSISTOR

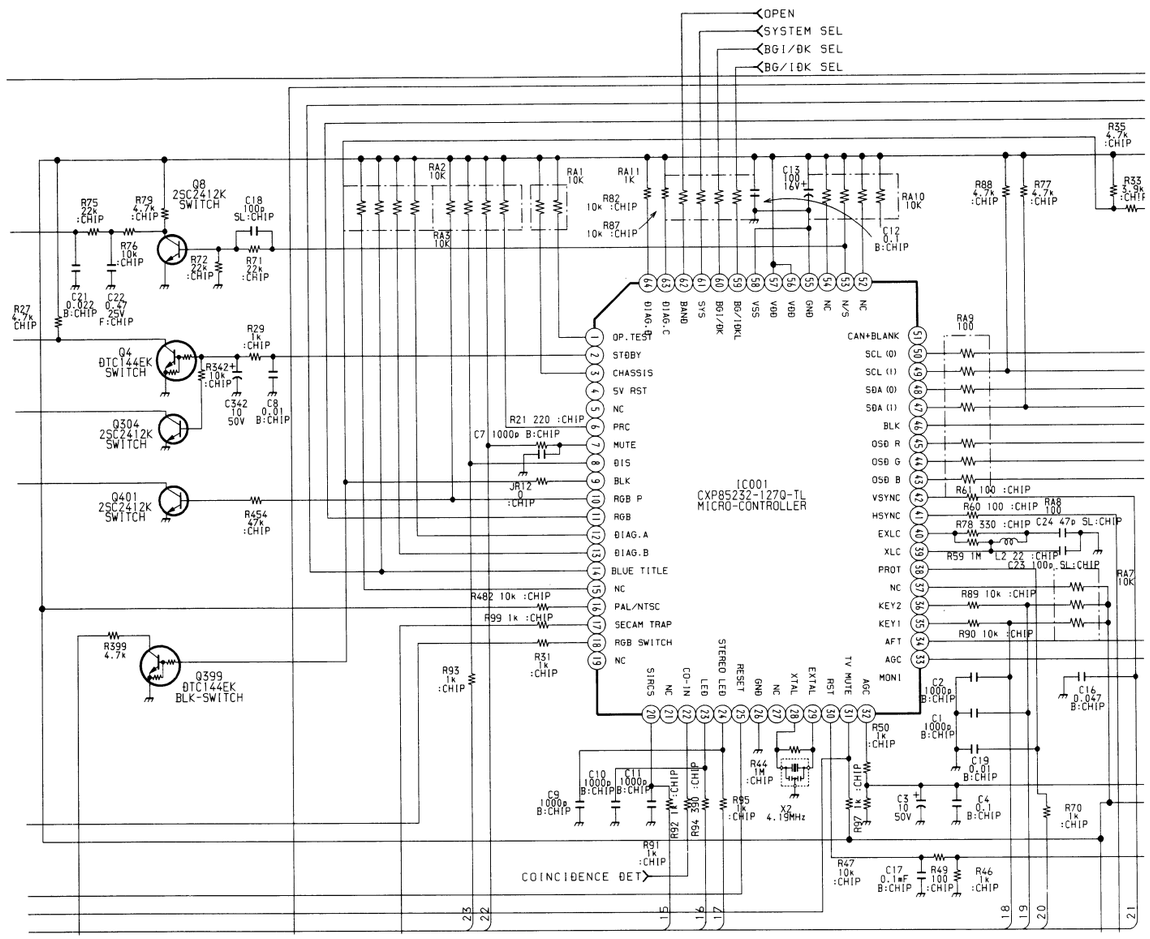
Q4	D-6
Q8	C-5
Q11	D-5
Q12	C-5
Q14	F-5
Q102	A-3,I-3
Q107	A-5
Q108	H-6
Q109	H-7
Q114	H-5
Q116	H-5
Q117	I-5
Q120	B-5
Q123	A-4
Q124	I-5
Q130	B-3
Q131	H-5
Q132	H-5
Q133	B-4
Q134	G-4
Q304	D-4
Q312	D-7
Q313	E-7
Q314	C-4
Q380	D-6
Q381	D-6
Q399	C-4
Q401	F-2
Q402	B-2
Q403	B-3
Q404	H-2
Q406	F-2
Q407	B-2
Q408	G-2
Q1001	F-2
Q1002	E-1

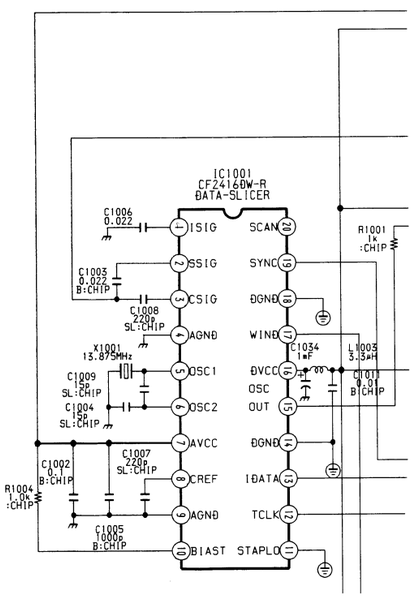
DIODE

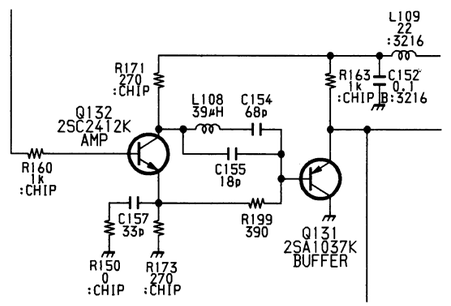
D6	F-6
D7	F-6
D9	F-6
D11	C-5
D101	B-1
D103	A-5
D201	A-6
D301	H-4
D302	B-3
D303	G-4
D304	B-4
D305	B-4
D314	B-3
D315	G-4
D317	G-3
D380	F-4
D401	B-2
D402	C-2
D404	C-2
D405	C-2
D406	C-2
D407	B-2
D408	C-2
D409	C-2
D410	C-1
D411	C-2
D1002	F-2




IC301
TDA8366H/N3
Y
CHROMA-JUNGLE
IC002
ST24C16CM1
NVM
D301
1SS355
D7
1SS355
D9
1SS355
D6
UMZ12N
Q314
DTC114EK
SWITCH
L307
EL-0606
X301
3.58MHz
X302
4.43MHz
JR302
0
:CHIP
D380
0
:CHIP
JR5
0
:CHIP
SPEAKER LOUT
L3
68µH
A (2/2)
TUNER AUDIO CONTROL
AUDIO AMP AV SW
RGB JUNGLE YC PROCESSOR
D BOARD
CN902


OPEN
SYSTEM SEL
BGI/DK SEL
BG/IDK SEL
IC001
CXP85232-127Q-TL
MICRO-CONTROLLER
Q8
2SC2412K
SWITCH
Q4
DTC144EK
SWITCH
Q304
2SC2412K
SWITCH
Q401
2SC2412K
SWITCH
Q399
DTC144EK
BLK-SWITCH
COINCIDENCE DET


IC1001
CF24160W-R
DATA-SLICER
X1001
13.875MHz
L1003
3.3µH


Q132
2SC2412K
AMP
Q131
2SA1037K
BUFFER

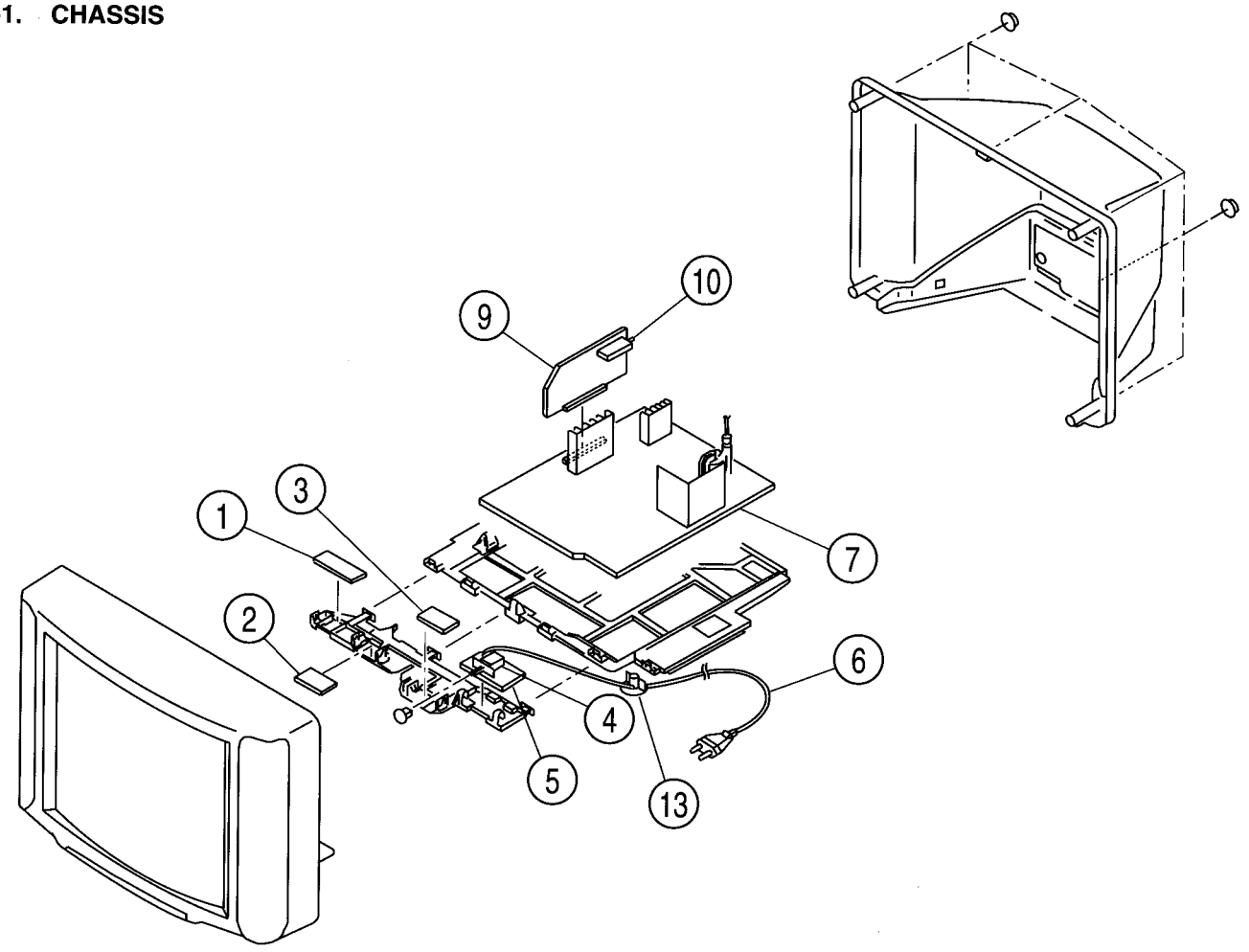
EXPLODED VIEWS

NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

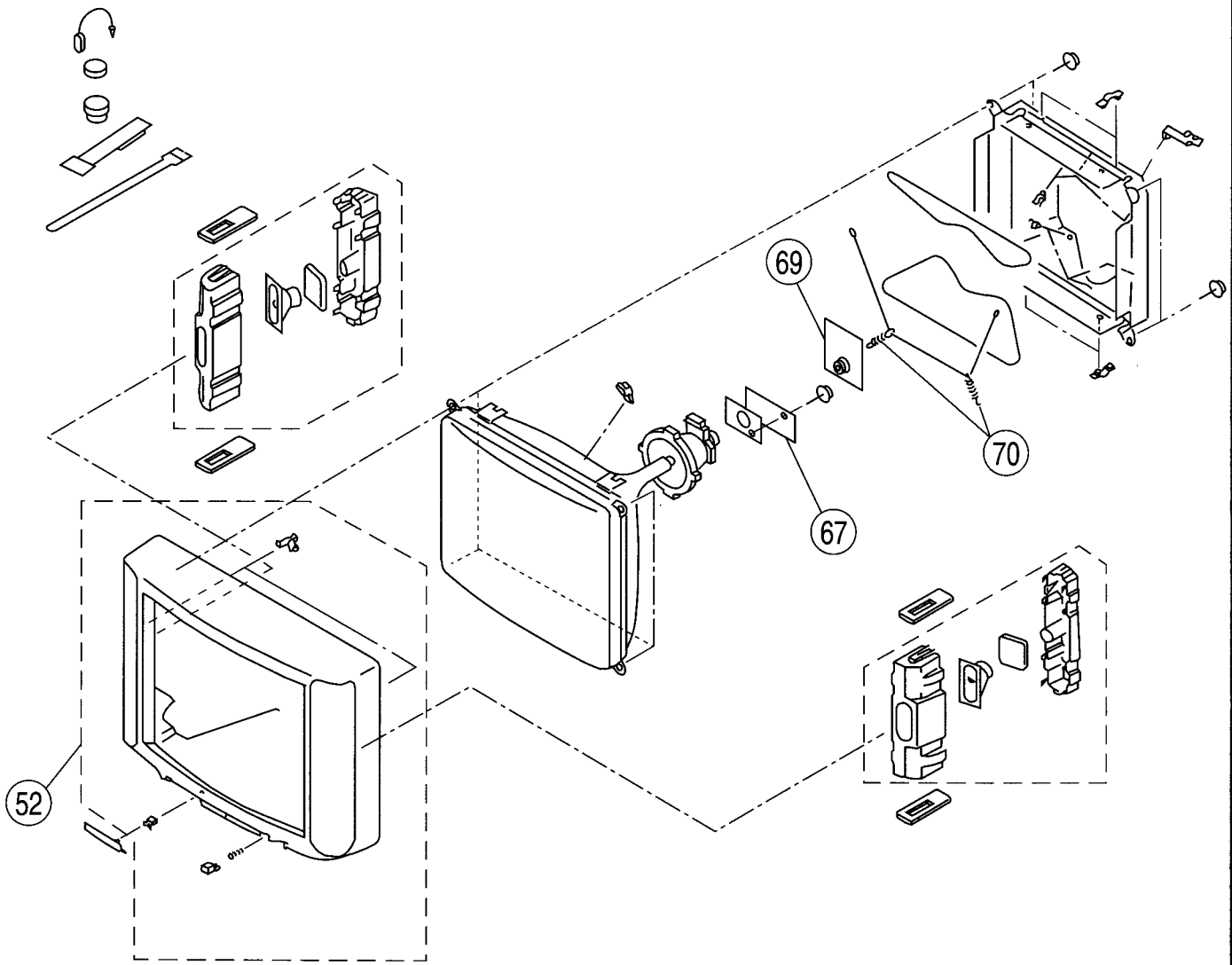
6-1. CHASSIS



REF NO	PART NO	DESCRIPTION	REMARK
1	*A-1646-057-A	H1 BOARD, COMPLETE	
2	*A-1646-059-A	H3 BOARD, COMPLETE	
3	*A-1646-058-A	H2 BOARD, COMPLETE	
4	1-571-433-21	SWITCH, PUSH (AC POWER)	
5	*A-1624-029-A	F1 BOARD, COMPLETE	
6	⚠ 1-690-270-11	CORD, POWER (WITH CONNECTOR) 2.5A/250V	
7	*A-1642-115-A	D BOARD, COMPLETE	
9	*A-1632-174-A	A BOARD, COMPLETE	
10	1-693-185-11	TUNER (UV-916H)	
13	*4-202-531-01	AC CORD LOCK (SC)	

REF NO	PART NO	DESCRIPTION	REMARK

6-2. PICTURE TUBE



REF NO	PART NO	DESCRIPTION	REMARK
52	X-4200-183-1	BEZNET ASSY	54 - 58
54	FITTED TO BEZNET ASSY		
55	FITTED TO BEZNET ASSY		
65	NOT USED		
67	*A-1644-028-A	VM BOARD, COMPLETE	
69	*A-1638-046-A	C BOARD, COMPLETE	
70	4-369-318-31	SPRING, TENSION	

ELECTRICAL PARTS LIST

When indicating parts by reference number, please include the board name.

CAPACITORS
MF : mF, PF : mmF

COILS
MMH : mH, μH : mH

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION		REMARK
	*A-1624-029-A	F1 BOARD, COMPLETE		
		**********		
**********				
	*A-1632-174-A	A BOARD, COMPLETE (KV-C2981D)		
		**********		
TP1	1-535-084-00	1P TERMINAL PIN		
		< CAPACITOR >		
C4	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C12	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C117	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C145	1-216-295-00	METAL GLAZE 0	5%	1/10W
C146	1-216-295-00	METAL GLAZE 0	5%	1/10W
C152	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C154	1-163-113-00	CERAMIC CHIP 68PF	5%	50V
C155	1-163-099-00	CERAMIC CHIP 18PF	5%	50V
C157	1-163-105-00	CERAMIC CHIP 33PF	5%	50V
C302	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C305	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C307	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C308	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C309	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C310	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C313	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C314	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C315	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C318	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C323	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C324	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C325	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C329	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C332	1-163-097-00	CERAMIC CHIP 15PF	5%	50V
C333	NOT USED			
C339	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C351	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C362	1-163-109-00	CERAMIC CHIP 47PF	5%	50V
C363	1-163-105-00	CERAMIC CHIP 33PF	5%	50V
C365	NOT USED			
C399	1-163-097-00	CERAMIC CHIP 15PF	5%	50V
C433	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C445	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1002	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1003	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V
C1006	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V
C1018	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1019	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1021	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1026	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1027	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1028	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1029	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1030	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1031	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1032	1-163-038-00	CERAMIC CHIP 0.1MF		25V
		< CONNECTOR >		
CN003	*1-568-879-11	PIN, CONNECTOR 4P		
		< DIODE >		
D7	8-719-988-62	DIODE 1SS355		
D9	8-719-988-62	DIODE 1SS355		
D11	8-719-988-62	DIODE 1SS355		
D101	8-719-977-81	DIODE DTZ33B		
D201	8-719-800-76	DIODE 1SS226		
D301	8-719-988-62	DIODE 1SS355		
D302	8-719-988-62	DIODE 1SS355		
D303	8-719-988-62	DIODE 1SS355		
D304	8-719-988-62	DIODE 1SS355		
D305	8-719-988-62	DIODE 1SS355		
D315	8-719-988-62	DIODE 1SS355		
D317	8-719-800-76	DIODE 1SS226		
		< IC >		
IC001	8-752-862-92	IC CXP85232-127Q-TL		
IC004	NOT USED			
IC101	8-759-277-66	IC TDA9814T/V2-T		
IC301	8-759-336-44	IC TDA8366H/N3		
IC302	8-759-288-85	IC TDA4665T-T		
IC1001	8-759-295-92	IC CF72416-DW-R		
IC1002	8-759-252-10	IC CF70200FN-R		
		< RESISTOR >		
JR5	1-216-295-91	METAL GLAZE 0	5%	1/10W
JR51	NOT USED			
JR57	NOT USED			
JR125	NOT USED			
JR302	1-216-295-91	METAL GLAZE 0	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION				REMARK
R21	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R124	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R152	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R220	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R334	1-216-105-91	METAL GLAZE	220K	5%	1/10W	
R368	NOT USED					
R399	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1005	NOT USED					
	< COIL >					
L1	NOT USED					
L2	1-410-385-11	INDUCTOR CHIP	22UH			
L3	1-408-419-00	INDUCTOR	68UH			
L105	1-408-410-00	INDUCTOR	12UH			
L106	NOT USED					
L108	1-408-416-00	INDUCTOR	39UH			
L315	NOT USED					
L1101	NOT USED					
	< TRANSISTOR >					
Q399	8-729-901-01	TRANSISTOR DTC144EK				
Q407	8-729-923-89	TRANSISTOR DTC123EK-T147				
	< VARIABLE RESISTOR >					
RV102	NOT USED					
	< TUNER >					
TU101	1-693-185-11	TUNER (UV-916H)				
	< CRYSTAL >					
X301	1-567-505-11	OSICILLATOR, CRYSTAL				
X302	1-567-504-11	OSICILLATOR, CRYSTAL				
**********						
*A-1638-046-A	C BOARD, COMPLETE					
	**********					
	< CAPACITOR >					
C704	NOT USED					
C706	NOT USED					
C707	NOT USED					
C709	NOT USED					
C714	1-126-967-11	ELECT	47PF	20%	16V	
C722	1-101-880-00	CERAMIC	47PF	5%	50V	
C723	1-101-880-00	CERAMIC	47PF	5%	50V	
C724	1-101-880-00	CERAMIC	47PF	5%	50V	
	< CONNECTOR >					
CN701	1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P				
	< DIODE >					
D702	8-719-991-33	DIODE 1SS133T-77				
D703	NOT USED					
D704	NOT USED					
D705	NOT USED					
D706	8-719-991-33	DIODE 1SS133T-77				
D707	8-719-991-33	DIODE 1SS133T-77				
D708	8-719-991-33	DIODE 1SS133T-77				
D709	8-719-991-33	DIODE 1SS133T-77				
D710	8-719-991-33	DIODE 1SS133T-77				
D713	8-719-991-33	DIODE 1SS133T-77				
D714	8-719-991-33	DIODE 1SS133T-77				
D715	8-719-991-33	DIODE 1SS133T-77				
D716	8-719-991-33	DIODE 1SS133T-77				
D717	8-719-991-33	DIODE 1SS133T-77				
D718	8-719-991-33	DIODE 1SS133T-77				
D719	8-719-991-33	DIODE 1SS133T-77				
	< RESISTOR >					
R713	NOT USED					
R743	NOT USED					
R744	1-249-426-11	CARBON	5.6K	5%	1/4W	
R745	1-249-426-11	CARBON	5.6K	5%	1/4W	
R746	1-249-426-11	CARBON	5.6K	5%	1/4W	
**********						
*A-1642-115-A	D BOARD, COMPLETE					
	**********					
NOT USED	RIVET NYLON, 3.5					
	< CAPACITOR >					
C616	1-111-067-11	ELECT	0.001MF	20%	25V	
C805	NOT USED					
C839	1-136-189-00	FILM	0.1MF	10%	250V	
	< CONNECTOR >					
CN600	NOT USED					
CN807	NOT USED					
	< DIODE >					
D504	8-719-991-33	DIODE 1SS133T-77				
D506	8-719-991-33	DIODE 1SS133T-77				
D613	8-719-045-48	DIODE FML-G12S				
D617	8-719-991-33	DIODE 1SS133T-77				
D618	8-719-991-33	DIODE 1SS133T-77				
D619	8-719-991-33	DIODE 1SS133T-77				
D620	8-719-991-33	DIODE 1SS133T-77				
D622	8-719-923-60	DIODE MTZJ-T-77-9.1A				
D625	8-719-991-33	DIODE 1SS133T-77				
D800	8-719-991-33	DIODE 1SS133T-77				
D801	8-719-991-33	DIODE 1SS133T-77				
D802	8-719-991-33	DIODE 1SS133T-77				
D808	NOT USED					
D815	NOT USED					
D902	8-719-923-60	DIODE MTZJ-T-77-9.1A				
D903	8-719-923-60	DIODE MTZJ-T-77-9.1A				
D904	8-719-923-60	DIODE MTZJ-T-77-9.1A				
D905	8-719-923-60	DIODE MTZJ-T-77-9.1A				
D906	8-719-923-60	DIODE MTZJ-T-77-9.1A				
	< IC >					
IC602	8-749-920-61	IC SE-135N				
IC603	8-759-144-82	IC UPC2405HF				
IC605	8-759-231-58	IC TA7812S				
	< COIL >					
JW150	NOT USED					

REF.NO.	PART NO.	DESCRIPTION	REMARK
L802	NOT USED		
	< TRANSISTOR >		
Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q603	8-729-027-08	TRANSISTOR 2SC2389STP-R	
Q1201	8-729-900-74	TRANSISTOR DTC143TS	
	< RESISTOR >		
R818	NOT USED		
R901	1-247-734-11	CARBON 39 5% 1/2W	
R902	1-247-734-11	CARBON 39 5% 1/2W	
**********			
	*A-1644-028-A	VM BOARD, COMPLETE	
		**********	
	< CONNECTOR >		
CN1701	*1-564-344-11	CONNECTOR, BOARD TO BOARD 8P	
	< DIODE >		
D1701	8-719-991-33	DIODE 1SS133T-77	
D1702	8-719-991-33	DIODE 1SS133T-77	
D1703	8-719-991-33	DIODE 1SS133T-77	
D1706	8-719-991-33	DIODE 1SS133T-77	
D1707	8-719-991-33	DIODE 1SS133T-77	
	< TRANSISTOR >		
Q1702	8-729-119-76	TRANSISTOR 2SA1175-HFE	
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	*A-1646-057-A	H1 BOARD, COMPLETE	
		**********	
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	*A-1646-058-A	H2 BOARD, COMPLETE	
		**********	
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	*A-1646-059-A	H3 BOARD, COMPLETE	
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